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An Inquiry into the Contagious Property of Hooping Cough. By J. Adams, M. D.

UNDER whatever artificial distinctions we attempt to confine Nature, we invariably encounter difficulties. They seem to teach, or rather to remind us, that though order may every where be perceived in the physical constitution of things, yet that it is in vain for us to attempt comprehending the whole design. In our division of the different kingdoms of nature, the different classes of animals, and the different varieties in each class, after all our labours, we arrive at a step which, instead of attempting to surmount, we are obliged to leave as a memorial of our own weakness.

If such is the case in the ordinary appearances of nature, how much greater must our difficulties be in attempting to reduce to order those transient appearances which disease assumes? Even here, however, we discover some general uniformity, which flatters our vanity by inducing us to suppose that we have detected a law; and though we often find ourselves mistaken, yet the detection of that very error brings us nearer to the truth.

I have been led to these reflections by the attempts which have for some time engaged me to ascertain the various kinds and degrees of contagion. For this purpose, the first object was to fix on a certain definition. Such diseases as are generally admitted to be contagious, agree in the following points. 1st. That as far as our knowledge extends, they can only be excited by matter secreted during the disease. 2dly, That every person under the influence of them is contagious either in the part affected, or by the effluvia from some part of his body. 3dly, That he renders those who are susceptible of the same disease, contagious also. 4thly, That the effect is confined to no climate, season, or temperature. 5thly, That if the disease produces a constitutional effect, the person is for ever

ever after insensible to that effect. The contagions in which all these laws are found with great regularity, are small-pox, measles, chicken-pox, and scarlatina.

There are others in which the contagious property is more doubtful; the plague and yellow fever, whether contagious or not, are only found to exist under certain temperatures, and at certain seasons, and the constitution remains still susceptible of each. Dysentery seldom spreads but at certain seasons, among men particularly situated, and leaves the subject as susceptible as before. What is vulgarly called typhus fever, though confined to no seasons, yet preserves the same law in leaving the subject for ever susceptible of the disease. All these may likewise be excited without the presence of matter secreted by another under the same disease.

These distinctions are so permanent, that if they are not sufficient to prove plague, yellow fever, dysentery, and typhus are not contagious, they at least show that their contagious properties are different from those of small-pox, measles, and scarlatina; and this difference is so permanent as to be universally admitted. But there is one disease which attacks a person only once during life, which seems confined to no temperature, season, or climate, and which when it occurs spreads generally among those who remain susceptible of it. In all these respects, hooping cough seems to have the property of a true contagion, yet it is often difficult to trace it from any certain source; and the instances in which, at one time, a diseased subject seems to prove contagious, at others perfectly innocuous, are much more numerous than in the small-pox, measles, or scarlatina.

In the latter end of the year 1806, the second edition of "Morbid Poisons" was published, and contained the following remark, or rather inquiry. "The hooping cough is attended with difficulties in the mode in which it subsides and returns, that I pretend not to account for. In many respects it seems to partake of the endemics, aided by a peculiar constitution of the air; and the advantages derived from a change of atmosphere would seem to strengthen this opinion: but I have not satisfied myself of the manner in which this disease arises and seems communicated."

The last number of Dr. Clutterbuck's Review, published at the beginning of 1808, gives an

"Account

"*Account of the spontaneous Appearance of Hooping-Cough.* By Dr. A. C. Willey, of Block Island (N. America).

"The *Tussis Convulsiva*, or Hooping-Cough, occurred here in April 1805, and did not become wholly extinct till some time in Autumn. What rendered it particularly worthy of attention, was its being indigenous. It made its appearance over the greater part of the island at the same time, and was untraceable to any apparent source. The insulated situation of this place is extremely favourable to observations, and the detection of facts of this nature, without the danger of deception; and has afforded, in the present instance, a fair demonstration that the hooping-cough can originate without contagion. Indeed, I am inclined to believe that the rise and progress of this epidemic disease do not depend so much upon contagion as is generally imagined. The universal belief that the system, during the operation of *pertussis*, generates a specific virus capable of communicating the disease, seems to have prevented the mind from looking any farther for a principle adequate to its production. But because the living system possesses the power of elaborating this virus, I know of no reason why we should deny its formation in the departments of inanimate nature. The laws of physiology and inorganic matter agree in the production of soda and lime; why not then in the generation of pertussic poison? That there *is* a principle, independent of contagion, capable of inducing this complaint, I feel fully convinced, not only from its origination on this island, but from the number of cases which I have seen in those who have never been exposed to contagion. This principle undoubtedly exists in the atmosphere, which it pervades to a certain extent; but what it is, and how formed, remains a curious subject for physical research."

In the last Number of the Medical and Physical Journal is a paper from Dr. de Fretis, of Madeira, by which it appears most satisfactorily that the hooping cough was imported into that island by the British troops.

My correspondence furnishes me with instances of hooping cough in the families of two ingenious and experienced physicians. These gentlemen, whose candour is equal to their abilities, without entering deeply into the subject of contagion, furnish in the events which passed immediately under their own notice, very striking instances of the introduction of the disease in one case spreading in all directions as if by contagion, in the other sub-

siding with the subject who introduced it, and without the use of any cautionary means.

Early in June, the eldest son of the first of these gentlemen came home from school, much indisposed with severe cough, accompanied with fever. One of his schoolfellows had, a short time before, been removed to his friends, in consequence of his being affected with hooping cough. This led to a suspicion which was justified by the event, for the characteristic symptoms of this harrassing disorder soon manifested themselves with considerable violence. About a week afterwards, a second son, who was at the same school, returned home, affected with the same symptoms, though in a much lighter degree. His illness soon assumed the peculiar marks of the tussis convulsiva. About a week or ten days after these two youths had been at home, the two youngest children began to cough, and gradually passed through the different stages of the same disorder. A maid servant likewise, who was persuaded that she had had the hooping cough in her childhood, was nearly at the same time with the younger children seized with cough, which soon became so violent and strangulating, as to preclude all doubt respecting the nature of her complaint.

As soon as it was ascertained that the children were affected with hooping cough, the usual frequent intercourse that subsisted between this and a neighbouring family, was so regulated, as to prevent, as much as possible, any communication between the sick children and the individuals in this second family, who had not passed through the hooping cough. Unfortunately, however, it was imagined, that one of them had had this disorder, and he was not interdicted from all intercourse; he was seized with the complaint, and in the usual period it visited progressively the several children of that family, who had not previously passed through the disorder.

I think it material to mention farther, that the second son was affected with it, and recovered for more than a week before he came from school; that during this time, but before the cough became uniquivocally *hooping*, he visited, with some others of his school-fellows, Mr. ———'s family, at Layton, and played a good deal with his children. I cannot precisely state in what time, but I believe in about a fortnight after this visit, these children were affected with coughs, which gradually put on the nature and passed through the gradations of hooping cough.

From

From these events, which though related from memory, cannot but be correct, the writer does not scruple to admit his conviction that pertussis is contagious, though till then he was in doubt. In answer to my inquiries as to the manner in which the individuals might be congregated in the different houses, and also how far the disease might be endemic in the neighbourhoods of each house, he favoured me with the following account.

The school is a solitary house, situated a mile from the town, with which it has little intercourse excepting on Sunday, in the attendance on public worship. A scholar, who appears to have been first seized with the disease in the school, had previously communicated with a family under the disease, on a supposition that he had had it. On his return to school, however, he was affected with cough, which soon assumed the character of hooping cough, and from him, it was believed, that it spread itself in the seminary.

The family at Layton to which it is suspected that one of my Correspondent's sons communicated the complaint, lives in a large airy house, completely and widely detached from any other habitation. Although the occurrence of the disorder in this family was imputed to this intercourse, it must be remarked, that the owner of this house had a son at the same school.

It is not altogether certain, whether pertussis was epidemic at Walthamstow and Layton; it is rather presumed not; there might be several cases of it, but that they were not so numerous, that the disorder could correctly be said to be epidemic.

In Hackney, however, the residence of my correspondent and the other family, it was very prevalent, to such a degree, indeed, that it may be decidedly affirmed to have been epidemic.

My Correspondent has four children, to all of whom this disorder extended its influence, but with different degrees of violence and duration. A maid servant also was visited very severely by it.

Within about forty yards of his house, is another family, whose children and his younger ones are in habits of seeing and associating with each other. As soon as it was ascertained that the hooping cough was in the family, this intercourse was suspended; some watchfulness was employed, to prevent unnecessary communication between the families. The hooping cough never made its appearance in this family. Is not the exemption of these chil-

dren from the influence of the disease to be referred to the adoption of these precautions.

The other physician gives the following account of the disease in his family.

"In the year 1798 this disease was very prevalent at Richmond, and all my children successively caught it; my eldest boy, then three years old, was the first that sickened; next my second boy, nearly two years old; and afterwards my little girl, at the age of seven months: the symptoms were manifest in the first of these early in the month of October, the last sickened about the middle of November; all of them had the disease severely, particularly the little girl, who was not free from it till July 1799. The early part of that year was inclement, the North East wind blew very severely, and constantly, through the whole spring.

"Towards the close of the month of April 1807, my second daughter, then eight years old, came home to London with the hooping-cough, from the school on Richmond Green, where many of the young ladies were affected with this cough; I instructed her to avoid kissing or drinking out of the same vessel that was used by my youngest son, then four years old; the child, I believe, was attentive to these instructions, and her younger brother continued free from the disease till the month of April 1809, when he brought home the disease from a writing school in the neighbourhood of the Charterhouse, to which he had been sent for an hour in the morning, for about three weeks; both these children had the disease mildly; my second daughter was perfectly recovered before the birth of a younger daughter, in the middle of July 1807. This last little girl was at home with her youngest brother during the whole of his hooping-cough; the same instructions were given him as on the former occasion to his sister, but he forgot himself more than once, and kissed his little sister. He was free from the disease in August, and she has not been affected with hooping-cough.—Is the contagion of hooping-cough less active in mild than in severe weather?"——

It must be admitted that these cases are by no means sufficient to fix the character of a disease; they are, however, inserted on account of the authenticity of the sources from which they are derived. It was my wish and intention to have collected many more facts, especially from practitioners in the country, who have the largest opportunities of tracing in insulated houses, the comparative contagion of hooping cough with small-pox, measles, or scarlatina,

latina. But on taking leave of the Journal as one of its Editors, I have been anxious to offer these hints for the consideration of Medical Correspondents, whose communications on the subject will, I doubt not, be as well received, and certainly as well attended to, as if directed to the Author of this Inquiry.

J. A.

The following Paper, besides the many useful Medical Remarks it contains, we wish to preserve as a valuable Record, in Addition to what may be found in Sir John Pringle's Works.

REPORT on the prevailing Malady among his Majesty's Forces serving in the Island of Walcheren.

1st.—Nature of the Disease and its Causes.

THE malady prevailing among the British troops in Walcheren, is the endemic fever of marshy countries; the effect of miasmata from a soil the most productive in deleterious exhalations of any, perhaps, in Europe. Its effects, however, are not confined to the British forces, for the natives are annually liable to a similar calamity; and, by the sick returns of the French army for the last seven years, it appears that, at least, one-third of its force has been yearly cut off by the endemic. It has, however, been observed, that, among the highest orders of the inhabitants, and the officers of the British army who have slept in upper apartments, and whose mode of life and comforts are necessarily superior, although they do suffer by the disease, yet the attack altogether is milder and less fatal in its termination; a convincing proof how much good may result from judicious interior economy in an army.

The disease is remittent or intermittent in form, according to circumstances, constantly following a general law of season; appearing among the inhabitants towards the end of summer; becoming more severe in the autumnal months, particularly August and September, declining in October, and nearly ceasing in November.

Among British troops, whose constitutions have not been habituated to the climate, who have been exposed to previous military fatigues, to external wet, to damp, and to crouded accommodation, the disease bears a character of

 greater

greater malignancy, corresponding with the degrees or combinations of all these predisposing causes.

The malady is not contagious in itself, but liable to assume that new form of fever wherever ventilation is defective, the patients crouded, or where other local causes of impurity prevail. This has been strikingly proved in some instances, particularly at Flushing, where we found the accomodations too confined and crouded, where the ditches are foul and obstructed, from the consequences of the late siege, and the streets filthy from imperfect police.

The robust young soldier is more prone to the endemic disease than the old, puny, or consumptive; and such men as have been recruited from dry mountainous districts, are more liable to be affected than those from flat and fenny countries. A proof of the power of habit to which we shall hereafter advert.

The tendency to relapse is very great, and the deaths therefrom have been numerous, and sometimes sudden. Perfect recoveries are rare; convalescence never secure; and where the recurrence of fever do not destroy life, they quickly lay foundations for permanent visceral obstructions; rendering a large proportion of the sufferers inefficient for future military purposes.

The soldier who has entirely resisted the epidemic of this year, may be expected to enjoy a good state of health until the succeeding autumn; when, though not exempt from an attack, he will be much less liable than one newly arrived.

But such men as have suffered from the prevailing malady will run the risk of being cut off by the inflammatory disease of the ensuing winter and spring, particularly March; in which month, according to the testimony of the inhabitants, such complaints are more frequent and fatal.

By the sick returns obtained from the inspector's office, for the last four weeks, it appears that, though the number of sick have increased, yet the actual mortality has gradually diminished; and, at our last inspection of the hospitals, we remarked, that the epidemic had assumed an aspect somewhat milder than upon our first arrival; leading us to hope that it is on the decline; notwithstanding, for some weeks to come, attacks may be expected among those who have not yet been affected, and its total extinction not accomplished till the winter has regularly set in; which, in this country, usually takes place in the month of November.

2d.—Present

2d.—Present State of the Sick; and Suggestions for affording immediate Relief to the Hospitals.

The numbers of sick and convalescents in the different hospitals, amount to more than two-thirds of the total force; and, notwithstanding about 1,500 sick have already been sent home by different conveyances from Walcheren alone, the constant occurrence of recent disease, and the numerous relapses, have necessarily kept the hospitals full, even beyond a just proportion; while the tedious recoveries have not permitted the discharges to keep pace with the daily admissions.

To give prompt relief to the existing pressure, to prevent the increased malignancy generated by the effluvia of a crouded hospital, to guard against the production of a contagious fever and dysentery, and to save the lives of many who linger in doubtful convalescence, it is suggested, that six line of battle ships, armed *en flute*, be properly fitted up in England, and be dispatched to receive all the convalescents and cases of fever, that can be removed with safety; each ship may take on board 300, and thus the hospitals on shore be relieved by the abstraction of 1800 persons.

The ships to land the sick at the different ports of Harwich, Deal, Portsmouth, or Plymouth, according to the accommodation those places respectively afford: a proportion of convalescent officers to accompany the sick, in order to keep up military discipline, and to enforce medical regulations. Bedding, medicines, diet, &c. of every description, to be furnished by the men of war, to save the stores so urgently wanted in Walcheren.

The pursers of the ships to keep proper lists of hospital stoppages, to be charged against the agent of the corps to which the sick belong.

The naval surgeons and mates (with the assistance of an army hospital mate, if required), will be adequate to the medical attendance on the passage, and thus the medical staff of the army be reserved for the duties on shore. These ships to return a second or third time, as may be necessary. One of the many advantages attending this scheme is, that each ship might sail singly without incurring the inconveniences and hardships attending the detention for convoy, and of embarking and disembarking great numbers at the same time in fleets of transports.

Independent of this arrangement, for removing sick to England, as an immediate relief to the hospitals, it is also suggested,

suggested, that there should be always roomy hospital ships in readiness to receive men, who are in the first stage of convalescence, to prevent the relapses so frequent and so fatal on shore; which ships should proceed to England with a fair wind, as occasion may offer, or according as the head of the medical department in Walcheren may recommend, for it is to be kept in constant recollection, that it is slow recoveries and relapses that cause the principal mortality, and swell the numbers in the hospitals, and that it is the prompt removal alone of convalescents to England, that can insure ultimate recovery.

3d.—Prospective Arrangements for preventing future Sickness, and for arresting the Progress of the Malady when it occurs.

The different Battalions now serving in Walcheren, have suffered lamentably by having been suddenly placed under the influence of the endemic miasmata, at the very worst season of the year, with unavoidably defective accommodation, and means ill suited to meet the unexpected calamity, that the majority are unfit for service, and should be removed to England, retaining only such men as have not been attacked by the disease.

The power of habit in reconciling the human constitution to noxious air has already been alluded to; the greater sickness of strangers, the superior healthiness of the natives, and the testimony of the French on this point, sufficiently confirm this principle; and grounding upon it, we presume to recommend to his Majesty's Government, in case the retention of this island should be determined on, to reinforce the garrison very early in the winter, (say November) in order that the constitutions of the men may in some degree be habituated to the climate before the return of the sickly season, which consists of the months of June, July, August, and September.

The troops should not be oppressed with duty, or enjoy less than four nights in bed: On the evenings of the nights on which they mount guard, an extra allowance of spirits to each man would be essentially beneficial; and when relieved next morning, a comfortable warm breakfast of strong coffee should be in readiness.

The Barracks ought to be of the best description, well guarded from cold and damp, with boarded floors; stoves and flues suitably directed to convey an equal temperature to the remotest corners, to be placed in each room. On no account should ground floors be used as sleeping apartments,

ments. The more lofty the buildings the better; for the tenants of the upper stories not only enjoy the best health, but when taken ill, have the disease in the mildest form; an instance of which came under our observation when we visited Fort Ramakins, and the same is confirmed by the experience of the natives.

The cloathing of the soldier should be of warm quality, and in the best repair; he should be equipped with woollen stockings and flannel waistcoats. The frequent changes of which merit particular attention from his officer. The shoes should be strong, of the best water proof leather, to guard against the peculiar damp of the country. The pantaloons should be of a spongy warm texture, blue or grey, in preference to white, that there may be no temptation to adopt the pernicious custom of cleaning them with wetted pipe clay.

The diet, especially in the sickly period, should be nutritive, and the broth well spiced with pepper; during which season, a small portion of unmixed spirit might be usefully allowed early in the morning.

Having ascertained that the crews of the vessels stationed in the very narrow channel (only a few yards from the land) between Beveland and Walcheren, have continued perfectly healthy the whole campaign; thus decidedly proveing that the noxious exhalation is nearly confined to its original source; We recommend, that before the commencement of the autumn of each year, several large ships be moored in convenient stations off the island, as floating barracks, to receive such part of the army as can be spared from the necessary garrison duties; and for the reception of the casual sick of that part of the army so embarked, a suitable number of hospital ships should be similarly anchored, to which also all convalescents on shore may be sent, who are recovering from the first attack of fever; by which early removal, fatal relapses so frequent among those who continue to be exposed to the local exhalations would effectually be prevented.

(Signed) J. BORLAND, M. D.
Inspector of Hospitals.
W. LEMPRIERE, M. D.
Physician to the Forces.

(Signed) G. BLANE, M. D.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS your respectable Correspondent of this month, whose Essay bears no signature, has replied with equal candour and liberality to my former observations, I felt a strong desire to comply with his request, and that of many others, by drawing out a short account of the intended Bill for improving the education and practice of future candidates. With this view, I solicited, and readily obtained the approbation of those who have taken an active part in the measures already instituted. I shall therefore proceed, with your leave, to lay the following statement before your numerous readers. I am enabled to execute my design from having been put into possession of a copy, which having been submitted to, and returned from one of the medical corporations, is now lying before me. The Bill provides,

1st. That all members of the curative art shall be registered in the capacity or capacities in which they practice. They are also to put their names and titles on the outer doors of their dwelling houses; by which means, strangers will be able, on emergencies, to find out proper medical help. Persons guilty of false enteries will be liable to heavy penalties.

2dly. "And be it further enacted, that from and after the day , no person *who shall not before that time* have practised or acted as a physician, shall be entitled to be registered or to take out any such certificate as aforesaid, to practice or act as a physician, or shall be entitled or allowed to practice, or act as a physician, for gain or reward, or be entitled or permitted to claim or receive any recompense or remuneration for such his practice, until he shall have taken the degree of a Doctor or Batchelor of Physic, in some British, or Irish, or Foreign University; and shall have obtained a Diploma or Certificate from the proper officer, of having taken such degree, and also shall have been examined by, and shall have obtained a Diploma or authority to practice as a Physician, from some one of the Colleges of Physicians of England, Scotland, or Ireland, respectively, or from the Faculty of Physicians and Surgeons of Glasgow.

"And no person, *who shall not before that time*, have practiced as a Surgeon, shall be entitled to be registered,

or

or to take out any Certificate to practice as a Surgeon, or shall be entitled or allowed to act as a Surgeon, for gain or reward, or to receive any recompense or remuneration for such practice, until he shall have been examined by, and shall have obtained a Diploma or authority to practice as a Surgeon, from some one of the Colleges of Surgeons in England, Scotland, or Ireland, respectively, or from the Faculty of Physicians and Surgeons of Glasgow. " And no person, *who shall not before that time*, have practiced as an Apothecary, or sold Medicines or Drugs, or chemical preparations as an Apothecary, Chemist, or Druggist, shall be entitled to be registered to practice, or act, or shall be entitled or allowed to practice or act as an Apothecary, for gain or reward, or to sell Medicines or Drugs, or chemical preparations as an Apothecary, or as a Chemist and Druggist, until he shall have served an apprenticeship by regular Indentures to some person or persons, actually practising, or acting, or selling, as aforesaid, in the capacity or capacities, in which the person so proposing to practice, or act, or sell, as aforesaid, shall register himself, and take out his Certificate, as aforesaid, nor until he shall have been examined by and shall have obtained a Certificate for the capacity or capacities in which he is to act, or sell, as aforesaid, from the Company of Apothecaries in England, or Ireland, or Scotland, from a Medical Board, to be established by the Commissioners appointed to carry this act into execution.

" And no person, *not having before that time* practised as a Man-midwife, shall be entitled to be registered, to practice and act, or shall be entitled or allowed to act as a Man-midwife, for gain or reward, or to receive any remuneration or recompence for acting as a Man-midwife, unless he shall be a Physician, Surgeon, or Apothecary, and shall have served or acted for twelve calendar months, under some person or persons, practising as a Man-midwife or Men-midwives, and shall have attended, or actually assisted such person or persons, in his or their practice, as a Man-midwife or Men-midwives, and shall have been examined by, and shall have obtained a Certificate from the Board of Midwifery Practitioners, to be appointed by the said Commissioners.

" And be it further enacted, that nothing in this Act shall extend to prevent any person from administering any medicine, or from practising as a bone-setter, or from acting in any other manner in Medicine or Surgery in which *he shall have acted before the passing of this Act*, from

from continuing so to practice, without being subject to any penalties for not being registered, and having a Certificate under this Act as a Physician, Surgeon, Man-midwife, or Apothecary, provided that such person shall have obtained, and have a Certificate and Licence continuing in full force, and not withdrawn, from any three or more Magistrates, assembled at any Quarter or General Adjourned or Petty Sessions of the Peace for the County in which he shall practice, and shall record such Licence annually, in like manner as registers are required to be made under this Act; and it shall be lawful for the Justices of the Peace, assembled at any General or Quarter Sessions of the Peace for the County or Place in which such Licence shall have been granted, as aforesaid, or the major part of them, to withdraw any such Licence, whenever they shall think proper; and the Clerk of the Peace shall therefore give notice to the Registrar, by whom such Licence shall have been registered, as aforesaid, of such Licence being so withdrawn, as aforesaid."

The preceding clauses contain the essence of the Bill, tho' of course many others are added to make them effectual, and are therefore inserted at full length for the information of the Faculty. I trust they have been drawn out with a proper regard to the present Faculty, and with a view to the gradual introduction of a mild and radical amendment. I entertain little doubt that several things mentioned will become objects of keen discussion, as they have a tendency to affect the interests, and prejudices of different persons. Had we now to originate a Medical Establishment for the Empire, I am free to admit, that greater changes and improvements might be recommended; but under existing circumstances and difficulties, perhaps nothing better can be attempted with the prospect of success. It is expressly provided for in the act, that all are to be continued in the capacities which they have been admitted to fill, without being subject to retrospective inquiries. For example, persons having occupied and been admitted *by their brethren* to discharge the duties of regular Physicians, though not graduates in medicine, will by this act become legitimate Physicians, and entitled to act accordingly; I must further observe, that according to the opinion of Chief Justice Mansfield, a Doctor's diploma does not in itself entitle the possessor to practise in the country parts of England. He must be an extra-licentiate of the Royal College of Physicians, or medical graduate of an English University. It is true, the College have no means

means of punishing the disobedient, because the statute is unsupported by penalties. This, I conceive, notwithstanding the vaunting of the College, is the reason for suffering the law to remain a dead letter. Doctors in physic, residing in London, are in a different condition; they can be convicted in five pounds the month for practising without the College licence. Still it must be admitted, that the provincial physicians are in a very aukward and humiliating situation. They are only Doctors by courtesy. They cannot, therefore, claim rank, or defend themselves in courts of law. In the cause lately tried at Stafford, before Judge Mansfield, a Physician who graduated in Scotland being grossly abused in his professional capacity, sued for redress, but could obtain none, because he had not complied with the act of Henry VIII. By the provisions of the Bill, Physicians now in being will become legitimate Practitioners; they will in consequence be entitled to the rank of Doctors, and to protection in all cases. In the same manner, persons from having acted as Surgeons, though they have no diploma, will be made legal, and entitled to the reward of a Surgeon. This is of infinite importance to the present race of surgical practitioners, who, as I formerly observed, can now obtain no legal recompence for professional insults, or any thing performed in surgery, unless they can produce a surgeon's diploma. Such is the irregular and degraded state of medical and surgical practice in England and Wales, where it is ascertained that general learning, personal experience, and the highest medical acquisitions will not avail themselves. It is, however, only reasonable, that the present establishment, from having entered upon their professional duties like their predecessors, without intending any thing improper, should be protected through life; but that no others be suffered to practise until they shall have complied with the Acts of Parliament, and intention of the Crown, in founding the medical Corporations.

Before concluding this long epistle, it will be necessary to remove the objections, and tranquilize the minds of some persons, who have hastily supposed that the proposed regulations will be injurious to the public and subordinate departments, by limiting Physicians, Surgeons, and Apothecaries to their respective lines. It is, indeed, declared in the Bill, that no person shall practise *as* a Physician, Surgeon, or Apothecary, unless he possesses an appropriate authority; but it is no where provided, nor was it, I believe, ever intended, that the same medical men should

should be prevented from practising, at pleasure, in all the departments of physic, surgery, or pharmacy; e.g. to practise *as* a Physician, the person must have his name and title inserted in a register, placed on the outer door. He will likewise, as formerly, subjoin his initials to prescriptions. Surgeons and Apothecaries must be registered in the same way. By these means, the several orders of the profession will be fully designated, but not prevented from exercising the different branches of the art. They will only be required to follow them under their respective titles. This is not the obtrusive statement of an uninformed person, it rests *upon high legal authority,* and is therefore deserving of every attention.

I am, &c.

A FRIEND TO A MILD AND GRADUAL REFORM.

February 10, 1810.

Description of the Plate to Mr. EARLE'S *Case of Suppuration of the Brain, discovered by Dissection, but not suspected during Life.* (*P.* 89.)

A. Slough of the dura mater.

B. Abscess in the substance of the brain, with its upper surface turned back, and covered with white sloughs.

C. A probe passed out at the lower opening of the abscess, between the convolutions of the brain.

D. Cut edge of the falciform process of the dura mater.

E. Opening by which the abscess communicated with the lateral ventricle.

F. F. Whole extent of the ventricle laid open by a horizontal section.

G. Plexus choroides in a sloughy state.

H. Ulcerated surface of the thalamus nervi optici.

Observations

Observations and Cases illustrative of the Effects produced by the Solar Heat upon the Human Body.

By Mr. John Howship, Surgeon.

THE numerous diseases to which the human frame is subjected, exposed as it is to the influence of the changing seasons in the various climates of the habitable globe, seem generally to depend either upon one or both of two causes; the first of which relates to the usual condition of the atmosphere as connected with high or low, moist or dry, confined or airy situations; the second arises from the direct influence of the heat of the sun, regulating the temperature of the air, and in a great measure, the excitement of the body. To the first of these may justly be referred the predisposition to, and even the production of many formidable diseases; but it is the second only, that will be the subject of consideration at present.

With regard to the effects of solar heat upon the human body, it may be observed, that those who in a temperate latitude, have usually enjoyed full health and strength, will upon removal to a warmer climate be very liable to suffer from any particular description of inflammatory attack to which there may have been constitutional predisposition; while, on the other hand, such as do not possess what is termed a good constitution, who never have been subject to inflammatory complaints, but have been considered to possess a weakly habit of body, do also generally experience very unpleasant consequences from a high temperature; many persons of the latter description complain, that their feelings are constantly those of irksome languor and depression; and from any continued exertion, or any accidental exposure to the sun, they will sometimes fall down suddenly, quite exhausted, and reduced to a state of temporary fainting and insensibility.

In the climate of the Mediterranean for instance, where Fahrenheit's thermometer, in the summer season, usually ranges between 70 and 86° in the shade, although not within the tropics, nothing is more common than such accidental complaints as arise simply from the heat of the sun operating variously upon various habits and in various constitutions; producing in some a violent paroxysm of highly inflammatory fever, or an attack of local inflammation; in others again, whose habit of body is weak and deficient, a sort of faintness, or a fit of sudden insensibility with languor, very generally preceded by some of the symptoms indicating an excessive debility; and it matters

not whether the weakly condition of the habit is an original defect in constitution, or the accidental consequence of former disease of viscera.

Upon tedious garrison parades, in the Island of Minorca, it has very often happened that a young soldier, a recruit lately joined from England, has been overcome by the heat of the sun, and has fallen down in the ranks: afterwards complaining of a most violent heat and sharp pains shooting through his head, which state has been quickly followed by the heat of skin, dry tongue, wild delirium, &c. that attend inflammation of the brain, although he was in all respects well when he first came upon the parade.

In precisely the same manner it has very frequently happened, that the most healthy men have been overpowered by the force of the meridian heat of the sun. It has been necessary to carry them off from the parade; and upon inquiry, it has been found, that they have either had a sudden attack of the most insupportable pain, prickling and darting through every part of the chest, with very great oppression, so as almost to prevent their breathing at all, or they have complained of a severe and fixed pain in the side, somewhere under the margins of the ribs, or near the ensiform cartilage, catching their breath in inspiration, and connected with an acute pain at the shoulder.

The force with which the sun is capable of acting upon the human body, is truly astonishing; it is such, as will very readily explain its occasionally exciting inflammatory action, either local or general, in the system, even allowing, that in some instances, predisposition is not taken into the account.

The effect of heat upon weakly persons is that of a stimulus, which, without exciting any excessive action in particular organs, may operate merely as a power capable of producing a sudden exhaustion of irritability in the body. It seems to be evidently upon this principle, that a soldier has, in many instances, suddenly fallen down in the ranks, after having complained of a swimming in his head, followed by a general state of excessive and inexpressible failure of strength over every part of his body; or upon being carried from the parade, he has been found pale, languid, and nearly senseless; every voluntary muscle, both of body and limbs, being involved in a state of universal tremor, or faint vibration, which has gradually subsided, in proportion to the readiness with which the system has recovered its due tone, and the man has thus been restored.

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But when the previous state of constitutional weakness has been very excessive, and the force of the solar rays also exceedingly great, the application of this powerful stimulus has very repeatedly been productive of a total and absolute exhaustion of the irritable or vital principle. The poor man has been struck down, almost as if by lightening; upon being carried into the shade, every possible exertion has been used to restore him to life, but in vain, and the man has died. It is however proper to observe, that such serious events as these are not of frequent occurrence, and are incident almost exclusively to such persons as have been long known to lead a life of intemperance, in whom consequently a state of great indirect debility must habitually have prevailed.

One of the most frequent immediate effects of the solar heat acting in force upon the living body, is the production of an inflammation; the stimuli acting either upon the external surface of the body, or else through the surface upon some of the contained viscera, any of which are liable to be thrown into a state of high excitement from the power of this most active agent.

Thus, in some cases, the heat of the sun has produced a temporary redness upon some portion of the surface of the body, raising the cuticle in vesications; while in other instances, troublesome inflammatory actions have been the consequence. In the year 1804, one of the soldiers of the 13th regiment of foot, then in garrison at Gibraltar, while engaged in washing his shirt upon the rocks at the sea-side, was not at the time aware of the day being particularly hot, but his back and shoulders having been exposed to the action of the sun, before the evening a very violent and alarming degree of inflammation took place upon the integuments, attended with severe shooting pains, darting through the spine forward to the sternum, producing great distress in breathing. In this case, by the adoption of prompt measures, the inflammation was prevented from doing any serious mischief in the breast, but in spite of every exertion, a slough formed upon the back, of considerable extent, and there was for some time a doubt whether the man would recover.

Independant however of those immediate effects enumerated above, the heated atmosphere of a warm climate may be considered to operate, though silently and slowly, yet rarely towards the production of any great changes in the state of constitution, in every individual who has formerly been resident in a more temperate climate.

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The peculiar diathesis to the establishment of which a residence in a warm climate seems favourable, is a certain modification of irritability, manifested in the evident tendency to some particular forms of nervous disease, but not to others. That such a diathesis may exist, dependant upon temperature alone, is rendered extremely probable by the fact of its being present in the warm, but not in the more temperate seasons, in the same climate. Thus, in the Mediterranean, in the month of October 1805, after the late Lord Nelson's glorious victory at sea, near 400 wounded sailors and marines were landed at Gibraltar, out of which number, as many as eighteen died of lock jaw and tetanus; while it was clearly ascertained, that in the month of December 1803, after the Toulon expedition, more than 400 wounded men were sent on shore for treatment in the naval hospital of that garrison, and from this larger number of surgical cases, there was only one solitary example of tetanus.

A Case of Coup de Soleil.

M. Kinnear, private in the 17th regiment of light dragoons, a strong and healthy man, twenty-two years of age, was on board one of the transports carrying his regiment out to South America, in the year 1806. From a deficiency in the supply of water, and the want of refreshments for the troops, it was judged expedient that the fleet should put in at St. Jago, off Cape de Verd. That island is situated in north latitude, and the fleet came to an anchor in the month of December; consequently, they arrived in the coolest season of that climate.

The heat of the sun was nevertheless very great, the thermometer generally being in the day-time as high as 80°; and, in the shade, and throughout the night, never below 78°.

On December the 14th, this man had been lying upon the deck after dinner, in conversation with several others, about two in the afternoon; about this time he felt himself drowsy, and soon after fell asleep. He lay exposed to the heat of the sun for about an hour, and then awoke, with excruciating pains in all his bones, together with a most violent shivering fit, so that he could scarcely stand up; added to these complaints, he had an intolerable degree of pain in his head, which almost took away his senses. He said that his head was "bursting" with horrible pain, darting and throbbing through his brain. The eyes were heavy

heavy, and the conjunctive membrane of a dirty red colour; the countenance in general full, and much flushed.

About his chest he suffered great distress; the most violent stitches of pain shooting through "every part" of the breast. The pains that were in his arms and legs, also, were very acute and excessively severe.

In this state he made a shift to creep down between decks, and got into his birth; here the violence of the trembling gradually subsided, and a little time after he got some repose. He slept till about six o'clock in the evening, when he was accidentally disturbed, and found himself still very hot. But it is remarkable, that this heat was unattended with thirst, or the least sensation of heat in the mouth. He was, at six o'clock in the evening, reported sick by the serjeant of his troop, and had still most of the above symptoms upon him; dreadful pain in the head and great heat of skin, and universal pain everywhere.

The heat of skin however was now, in some degree, subsiding into a state of perspirable moisture. An emetic of ipecacuanha, so directed as that it should operate very mildly, was ordered for him; this answered very well, and before midnight his stomach was cleared, and the bowels, as well as the surface, sufficiently relaxed. The pain in his head continued through the night so distractingly severe, that he was at times nearly delirious; and when his bowels were disturbed by the operation of the medicine he had taken, it was only by the assistance of two men that he could be removed, as he appeared neither to have power nor reason to enable him to direct his steps.

Early the following morning he was seen, and was found to be greatly relieved; the stitches through the breast being much less frequent, and much diminished in severity. The pain in his head, also, was very much alleviated. The pulse had been in the first instance much quickened, although not particularly hard; but it was, by this time, perfectly restored to its former state of tranquillity, beating only ninety in the minute.

The pain in the head from this time continued to diminish, but he was in point of strength more reduced than can be believed; and was for several days afterwards confined to his birth from mere weakness, being unable to support himself upon his feet. This man recovered.

A Case of Coup de Soleil.

J. Gready, a strong healthy lad, nineteen years of age, a private in the 17th light dragoons, upon the 22d of December, 1806, was on shore at Porta Praya, St. Jago, with the fatigue party upon the sands, for the purpose of assisting in watering the fleet. He was employed in rolling the empty casks on shore from the boats, and in rolling them back again through the shoal water to the boats again, after they were filled. At this duty he was nearly naked, having on only a pair of loose canvas trowsers; and he was of necessity constantly in the salt water. With the party he returned on board at the usual hour in the evening, and was almost immediately afterwards seized with a violent trembling in his limbs and body; attended with so severe a pain in the head, that he was every now and then delirious. According to his own mode of expression, his head throbbed as if it was in the act of splitting. Consistent with this persuasion, he requested that his head might be bound round as tight as possible with a handkerchief. He also suffered extremely from pains darting violently through every part of his breast, and about the sternum especially. With these complaints his pulse was quickened, but was perfectly soft and small: the tongue was rather disposed to whiteness, and he complained of being very thirsty. An emetic of the ipecacuan powder was ordered for him; which operated so powerfully in his favour, that by the following morning he was almost completely relieved from the pains, with which he had been afflicted in his head and in his chest.

Upon the second day afterwards, the only remains of his complaints were about the breast. He had still a stitch of sharp pain now and then, and a troublesome cough, which was not perfectly removed for several weeks after the accident; but eventually he recovered.

A Case, in which fatal Disease arose from a Coup de Soleil.

A soldier in the garrison of Gibraltar, while on a working party, weary and fatigued, laid down upon his face, and soon fell asleep, at a time when the day was clear, and the sun hot. He soon, however, awoke in great pain, and was confined to his bed in the hospital for six weeks after, with no other complaint than a constant and distracting pain in and about his forehead. At the completion

tion of this period, he said that he found himself getting better; in short, being a good soldier, he volunteered going to his duty, in preference to being considered any longer an invalid. Nothing more was heard of him by the surgeon for six months; when the pain in his head became again so urgent, that he was at last obliged to give way to it, and report himself. He was a second time admitted into the hospital, and the pain became for a considerable length of time remittent; returning with aggravated severity every morning, and sometimes missing a morning, or changing its hour of increased violence. Still, however, the constitutional health continued unimpaired; the appetite had been constantly good, and the pulse undisturbed; the skin always cool and perspirable, and the tongue moist.

About two months after his second admission into the hospital, he felt himself growing worse in the night; he became slightly delirious, and soon after this expired.

Upon examination of the head after death, it appeared that an universal increase of vascularity had taken place within the cranium. In no part of the cerebrum, however, could any decided disease be discovered. Upon raising the tentorium, however, the surface of the cerebellum was found to be in a state of disease; an ulcerated superficial cavity being found, that was about the size of a shilling, containing a thin ichorous matter. The pia mater and vascular tissue were destroyed and lost on this part, and the corresponding surface of the dura mater discoloured.

Mill-street, Hanover-square,
January 16, 1810.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Lament exceedingly, that your Journal for last June did not earlier attract my notice. If I had been so fortunate, I certainly should have deemed it a duty to have answered with more promptitude Mr. Spencer's statement of the pernicious effects of ipecacuanha upon his apprentice, with the hope that the recital of my own case would

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furnish that gentleman with useful information, and gratify the object of his humane inquiry.

I have preferred this public to any private communication, as best calculated to fulfil a good intention; at the same time, I indulge my inclination to promote the utility of your valuable publication; which so largely contributes to the diffusion of medical knowledge, by recording important or singular facts, illustrative of the history and practice of medicine.

In the year 1787 or 8, when I had been about two years an apprentice, in pounding the root to make the ipecacuanha wine, I was suddenly affected with violent and reiterated sneezings, with a very profuse defluxion from the eyes and nose: these symptoms continued without intermission, for many hours, accompanied by great heat and anguish throughout the cavity of the thorax, and the most oppressive dyspnœa. Exhausted by the violence of this attack, I was conveyed to bed; where supported, for I was unable to lie down, I remained more or less afflicted till the next morning. I arose extremely weakened, and with all the usual appearances of a severe catarrh.

Anterior to this event, I had never been affected by ipecacuanha, or if I had been so, it must have been very slightly; and was perhaps imputed to the sudden effects of an ordinary cold. From this date I have been perpetually tormented by violent catarrhs. Subsequently, the slightest motion of the simple or compound powder of ipecacuanha superinduces precisely similar, but more gentle effects. When weighing or mixing these powders, afterwards, I carefully guarded my mouth and nose by a cloth; but an incautious removal of it, for inspiration, till perhaps half an hour had elapsed, after the medicine was finished, occasioned the same inconveniences. At length I was compelled, except from the most urgent necessity, to quit the shop, while ipecacuanha was in hand; indeed, I have frequently entered my own, or the shop of a stranger, long after it had been used; and by the instant recurrence of these very distressing sensations, have been able too accurately to ascertain the recent exposure of this drug. I have resorted to various expedients for relief, but found none so efficacious as copious draughts of warm water, which appeared to promote expectoration, and with the increase of this, all the symptoms became gradually less irksome.

Although fully aware of the deleterious qualities of ipecacuanha by inspiration, I had no suspicion it would produce when taken internally, any extraordinary effects.

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Some months, perhaps a year, after the first attack, I took a dose of the compound powder of ipecacuanha at bed-time, as a sudorific, in the form of a bolus; I speedily felt the pains in the chest, with dyspnœa, but not so acutely as when introduced by the breath; there was neither sneezing, nor defluxion. Deterred by this uncommon circumstance, I never designedly had recourse to ipecacuanha for more than twenty years. Two accidents lately, within a few weeks of each other, afforded me the opportunity of determining its present effects, when inwardly administered.

A friend, hearing me cough in the street, presented me with a few lozenges; I took two at once; they were scarcely dissolved, ere I felt a pungent roughness in every part of the mouth, exciting a great secretion of saliva; this, it is worthy of noting, was the reverse in the preceding attacks, when the excretory ducts uniformly denied their offices, and occasioned a disagreeable dryness of the mucous membrane. As this acrid sensation extended to the lips, they became prodigiously swollen and inflamed; on the fauces I experienced the like effects, with a most teazing, itching irritation; it descended the trachea, producing pain and dyspnœa; it likewise proceeded down the œsophagus, creating a slight heat in the stomach, and passed with moderate gripings throughout the intestinal canal. The swelling and soreness of the lips continued the longest of these symptoms, but none were sufficiently severe to induce alarm. Soon after, a powder was brought to my house, with an order to prepare more of the same kind. I conveyed a few particles to my tongue, to discover its composition; I quickly experienced those feelings in the mouth and lips, which arose from the lozenges before, but in a milder degree, and they extended no further. Upon referring to the prescription, I found that there was one grain of ipecacuanha, with ten of calcined magnesia. This incident gave birth to an idea, that the former strange affection had originated from the same cause as the latter, and upon due inquiry, my suspicion was confirmed; they were ipecacuanha lozenges which I had swallowed.

This aptitude to take cold, and susceptibility to the action of ipecacuanha varied but little, till I was about thirty years old; since, though still distressed by the application of this drug, yet the violence of its operation is considerably diminished. Catarrhs occur at longer intervals, but with more severity, and with increased difficulty

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of breathing, and with more serious derangement of my general health.

In constitutions possessing this peculiar disposition, phthisis pulmonalis will, in all likelihood, supervene, and assuredly still more so, where a spitting of blood may have been excited; happily, this has never happened to me. From a strict adherence to a regular and temporate mode of living, I apprehend no such consequence; but I fear, that at no very distant period, I shall have to contend with a permanent asthma. One of my parents was always extremely liable to catarrh, and at 40 had a severe attack of asthma, from which she has remained entirely free many years; some of my children partake of the same disposition, but neither generation are similarly affected by ipecacuanha.

By the consequences which resulted from the lozenges, it is very probable, that if I had taken as large a dose as is usually exhibited for an emetic, the same train of symptoms would have succeeded, as was witnessed upon Mr. S's apprentice.

Upon a subject so personal and interesting, I have made extensive inquiries, but never heard of more than one other case besides Mr. Spencer's; and that I suspect, is the same as mentioned by Mr. Royston in his Remarks on a Medical Topography. I do not observe that Mr. S's communication and request for information, has received any notice from your numerous readers; hence, it is fair to infer, that this peculiarity of constitution is extremely rare, or surely in so wide a range as your excellent Journal embraces, some practitioner would have transmitted the required intelligence.

The virtues of ipecacuanha are now so justly and universally appreciated, it forms a component part of such various pharmaceutical preparations, prescribed for numerous diseases, that it appears next to impossible, but what the above related singular symptoms must occasionally have occurred in practice. These anomalies would naturally induce considerable surprise and alarm, both in the patient and the medical attendant, who, unsuspicious of the real, would ascribe them to an erroneous cause, which might lead to a very fatal result.

I presume it is highly probable, that these remarkable effects on the system from ipecacuhanà, in the first instance, occurred by the excess of a particular stimulus, adventitiously applied to the mucous membrane, which ever after retained a peculiar susceptibility to the specific irritation

irritation of this drug; else, why should I have remained nearly two years exposed, yet be insensible to its influence?

Ipecacuanha is capable of being reduced into one of the finest and most impalpable powders; which by motion, is readily diffused, and becomes buoyant in the circumambient atmosphere: these minute particles are soon inhaled with the common air, and produce this simultaneous and irritating action, by contact with the sensitive mucous membrane, extended over the organs of respiration. The grosser particles of snuff, or of other stimulating powders, excite no more irritation on me than on others.

I conceive it will be difficult, if not impracticable, to offer a satisfactory solution to Mr. S's question, "how is this morbid sensibility to be removed?"

For the last eighteen years, I have been little exposed to the effluvia of ipecacuanha; but I know from experience, that as I grow older, its impression, though not lost, is evidently lessened, and, perhaps, will entirely cease with the progress of age.

Gonorrhœa and catarrh are inflammatory affections of the mucous membrane, by the application of certain stimuli. It is undeniable, that from the frequency of the attacks, or from the advance of years, that the aptitude to imbibe, and the violence of both these diseases, materially decline; and at length the habit generally becomes totally insusceptible to the action of either.

Finally, upon these grounds, I conclude, that during the inflammatory diathesis, natural to adolescence, and the earlier stages of life, this peculiar tendency to the morbid effects of ipecacuanha will continue, and that Mr. S's apprentice and myself, can look forward to old age alone for protection; though, if we exist to that period, we shall inevitably be living monuments of this unfortunate and curious idiosyncracy.

I am, &c.

B.

February 1, 1810.

*** One of the Editors recollects a somewhat similar effect produced on his father, when exposed to the effluvia of ipecacuanha, whilst it was under bruising. Nothing of the kind, however, happened from the internal use of the same remedy, for Dover's powder was frequently taken with only its common sudorific effect.

Letter

LETTER to the Société de Medicine at Paris, on the Plica Polonica. By M. de La Fontaine, Surgeon en Chef to the Polish Army, and Physician to the King of Poland.

(From the Journal de Medicine.)

I Have read in several Journals an extract from a Memoir of M. Roussille Chamseru on Plica. This memoir contains errors which it is easy to refute, by experiments founded on incontestible facts. The author seems to have seen nothing but false plica, and all his assertions are erroneous. I am prepared to answer them in a more detailed manner; in the mean time I beg leave to submit some reflections to your judgment.

I resided in Poland for 30 years. It was at Cracow that I commenced my medical career, and practiced there five years, when the late King of Poland called me into his service. While in this situation, I conceived the idea of studying the plicous disease, endemic in Poland. With this view I took several natives who were affected with plica into my own house. Having them thus under my eyes, and having an opportunity of conversing with them frequently during the day, I thought I could better trace the progress of the disease, and make some fundamental observations. I added theory to practice; I procured various works on the plica; read all the authors who had written on the subject, and who exceeded seven hundred in number; among these are some of the most distinguished characters of the last three centuries.

At Warsaw I continued my laborious inquiries; a very extensive practice in the most populous city in Poland, the hospital of the Court, and various other hospitals, afforded me ample opportunities of daily observing cases of plica, and watching its various shades, distinguishing the true from the false plica, and, above all, of minutely examining the affections, which, like masked diseases, are the precursors of plica.

After a study of fifteen years, and the treatment of several thousands of persons affected with plica, I ventured to print my work. Since that period I have never missed any opportunity of acquiring additional knowledge of this singular disease. The circumstance of the hair, in plicous cases, becoming grey, as if from the effects of age, particularly attracted my attention, not having witnessed such a case before, as well as the different heads of chro-

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lic diseases, which happen before or after plica, and upon which I had only noticed the most prominent features.

The difficult art of ascertaining diseases, and curing them methodically, requires long continued studies, and a series of well regulated observations, particularly when so complicated an endemic as the plica polonica is under examination. To attain this object, a long residence in the country is requisite, besides consulting and profiting by the experience of those who have preceded us; setting out on a sound theory, we ought always to have observed a prodigious number of similar cases before the crisis; for without being acquainted with the country, the inhabitants, their ways of living, manners, customs, external and internal causes which injure the body, food, air, climate, &c. without frequent intercourse with enlightened men acquainted with the subject; in short, without studying by himself this singular disease, an author cannot give any real useful precept for the treatment that ought to be applied. From what M. Roussille Chamseru asserts in his works, I maintain that he has not seen a single patient labouring under a true plica: for we cannot regard as such, the man and the dog of Posen, since, if they ever had the true plica, they were by that time free from that disease. He has not seen any thing therefore but the termination of the plica, i. e. the crisis: at this period the plica is finished; the disease has ceased, and the patient is convalescent.

The means proposed by M. Chamseru for destroying plica, are prompt and easy; and his prejudices induced him to regard them as demonstrated. He asserts, that we may cut off the plica without any danger; it is fortunate for those who are attacked with this disease, that an advice so prejudicial, thrown out at random, has met with little approbation in Poland.

If M. Chamseru had ever an opportunity of seeing patients in whom the plica was not yet declared, or in whom the plica was quite recent, and still firmly attached to the head; if he had seen this plica on the banks of the Vistula, the Narva, the Niemen, the Bug, and the Wolga, instead of observing it at Posen, which is nearer Germany; if he had seen a true plica cut, when recently formed; if he had been present at the frightful, or even mortal scenes which succeed this operation, he certainly would not have hazarded such an opinion.

The author of the memoir on plica regards want of cleanliness, the use of furred bonnets, grease, and the neglect to

to comb the hair, as the sole causes of this disease. He says also, that men are more frequently attacked than women. For my part, I, who have seen and cured this disease for thirty years, maintain the contrary, and my assertion is founded on several thousand different experiments.

Women in general have more hair than men, and consequently the plicous matter in them is more easily propagated; besides, the men in Poland have their heads shaven, and are therefore less subject to be infected with plica than the women.

As to want of cleanliness, considered as a cause of plica, we shall venture to say, that the lower classes in all countries are negligent of their persons, and yet we do not find any instances of plica in other nations, as we do among the Poles.

There are hairy parts of the human body which it is not usual to comb, and yet this neglect is attended with no inconvenience. In Poland, on the contrary, the plica is frequently found in those parts, nay even children are born with plica, a circumstance which, of course, cannot proceed from want of cleanliness. It would seem also that the author has not seen the nails of the hands and toes affected with plica, since he does not speak of this circumstance in his Memoir.

Daily experience demonstrates, that no age and no condition is exempt from this disease, and even the utmost attention to cleanliness does not always preserve from infection; this proves that the plica is really a disease peculiar to Poland. All authors, however, who have hitherto written on the subject, have carefully distinguished between true and false plica. These two diseases, in fact, have very different characters, which have entirely escaped M. Chamseru. The false plica arising only from the hair being twisted, and plaited by grease and filth. The use of the comb will necessarily excite pain, and yet it is possible to use it. This kind of plica is always far removed from the head, an advantage which it possesses over the true plica, which on the contrary always renders the hair firmly adherent to the head, forming as it were one mass; the slightest touch gives the patient the most acute pain, and even frequently produces convulsions; it would therefore be very dangerous to cut a plica of this description.

None of the authors who have written on this disease, have doubted its existence, but they are not agreed with respect to its origin, the manner of treating it, and particularly as to the danger of cutting it off. Several maintain

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that this operation may be performed, while others are of a contrary opinion; both ways of thinking are correct, although at first sight, they seem formally to contradict each other.

Those authors who have forbid us to touch the plica, far less to cut it, have made their observations on true plica, recently formed and strongly attached to the head: hence proceeds their erroneous opinion, that plica must in no case be cut. Others, on the contrary, have made experiments on false, or upon true plica, which have become detached from the head, and have affirmed, that it may be cut without danger; upon these two different observations have the opinion of authors been founded. I flatter myself that I have been the first to clear up the doubts, and to resolve the various questions which have arisen on this subject; because my multiplied observations have taught me that we cannot cut a true plica without great danger, when in its first stage, and adhering to the head. All the symptoms must have entirely ceased, the plica must be removed from the head at least two or three inches, and we must have seen new and sound hairs springing up which push it downwards. Lastly, the patient must have gone through a complete crisis before we can cut the true plica, whereas the false, as it proceeds from want of cleanliness only, may be cut at any time without danger.

The first partition of Poland furnished some remarkable instances of what I now advance. Among the Polish recruits raised by the new possessors, there were many young persons affected with plica. Russia, where this disease is endemic as well as in Poland, and particularly in the provinces adjoining the latter country, did not enrol any, but Austria and Prussia did. The German surgeons of that period had false notions respecting plica; the heads of the new soldiers were shaved, which caused convulsions and death in some; while others, who had undergone a similar operation, got well. New opinions continued to be started among medical men, until the publication of my work, in which the different cases, founded on authentic observations, were analysed. I pointed out the circumstances in which it was possible to cut plica with advantage. One of the best surgeons in Germany, M. Theden, sent me the following letter on the subject, (1792.) "I have read your work on plica with great pleasure: the contents will be highly useful to the Prussian army. Hitherto our Polish recruits have furnished us with sad examples of the ignorance in which we were on the subject of this disease.

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Last year, three young men died suddenly from epilepsy, when we cut off the plica from them; this will not happen in future, for we shall strictly adhere to your directions. I have made an application to the Prussian Government, with a view to procure a copy of your work for every regimental surgeon, and have requested, that these gentlemen may be instructed to adopt your practice in future."

The terrors evinced by the Poles themselves, when it is proposed to cut the plica, does not proceed, as M. Chamseru pretends, from national prejudices, but from many examples of dreadful accidents, occasioned by the imprudence which they have sometimes witnessed of cutting true plica when strongly attached to the head; hence, the Poles refused to submit to the operation, whatever may be the kind of plica they labour under, and we frequently see true plica entirely detached from the head, which remain until they fall of themselves, or until a new plica is formed. There have been instances of double or even triple plica. M. Jenker, teacher of Surgery at Berlin, has in his possession, a true plica eleven ells in length: plica of this description are surely unknown to M. Chamseru.

I have seen an instance of a man attacked with a pleurisy, whose pains ceased the moment that his hair (which was perfectly sound two hours before) became truly plicous. I have also seen apoplexies, convulsions, and epilepsies disappear immediately on the plica being formed as a crisis. In my large work, I enter upon all these causes at greater length. I have observed phenomena of a most extraordinary kind in the operation for cataract; *i. e.* in cases where the liquor of Morgagni was opaque, the crystaline remained perfectly clear and transparent in plicous patients. Since the appearance of my work on plica, I have undertaken fewer hazardous operations in such patients, and on this account, I have had the good fortune to restore to sight several blind persons, without any other treatment, and without the most trifling operation. It is proved beyond doubt, that in no country in the world, are there so many blind persons cured as in Poland, particularly those who are attacked with amaurosis, the most formidable of all the diseases of the eye: I do not allude to the ordinary diseases of that organ.

I have confined myself to the foregoing examples, because I think them sufficient to fulfil the object I had in view, namely, that of refuting the assertions of M. Chamseru. The cause of humanity, and above all, the inhabitants of the North of Cracow would be considerable gainers,

gainers, if as this author alleges, the plica polonica was not a disease; but it is very difficult to retain the opinion of more than 700 authors, and it is still more difficult to extirpate an endemic disease, by hazarding a theory which cannot be supported by positive facts.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AMONG the various papers which have been published in your Journal, on the existing state of the Medical Profession in this Empire, I do not recollect to have noticed one from Essex. This induces me to offer you what appears to me to be the most prominent features of our situation.

To begin with our M. D.'s, they are unquestionably men of learning and professional skill, and many of them act from honourable motives for the interest and welfare of the inferior branches of the profession; I wish I could say thus much for "all." But if a physician who enjoys a very extensive and lucrative practice, descends beneath the dignity of his profession, in recommending (either in a direct or indirect manner) his prescriptions to a favourite druggist, to the material injury of the apothecary, whom he studiously avoids; and when compelled to meet him, conducts himself with all the parade of conscious superiority and indifference, far unlike that confidence and respect which ought to be kept up between the physician and apothecary, not only for their individual comfort, but for the safety of the patient: I say, if a physician conducts himself thus, he can only be biased by selfish and unworthy motives, disgraceful to his character and profession; but disgraceful as it is, truth bids me declare, that one instance at least of this kind exists among us.—I am disposed to believe that most of the retail druggists are able to compound a prescription faithfully, but still it is not their province, and the general practice of it lessens materially the honest and necessary emoluments of the apothecary. I say "necessary," for surely an apothecary ought to obtain a respectable and comfortable competence for his labour.—We have also a physician who prescribes and compounds his own medicines, and also practices as a surgeon and ac-

 coucheur.

coucheur. This I apprehend is not a very unusual case of irregularity.

Retail druggists have very much increased within a short period of time. This appears to arise from the custom of their compounding prescriptions becoming daily more prevalent, and from this custom we may fairly date the origin of a very serious event confined to the lower classes of the community. For by compounding prescriptions, the druggist acquires the knack of "prescribing" himself! thus uniting in his own person, the offices both of "physician and apothecary." Many of them acquire by this means no inconsiderable practice among the poor, their charges being lower than those of the apothecary; at present, this it appears can only be prevented by regular practitioners adapting their charges to the abilities of the patient; perhaps this is now practised to a certain extent, though not sufficiently. A man actuated by benevolent motives of this kind, will eventually obtain more deserved reputation, respect, and even emolument, than he who insists upon the same remuneration from all patients indiscriminately. I wish this spirit of liberality was more prevalent; where it does reside, the druggist can do but little harm.*

Uneducated men, stiling themselves "surgeon-apothecaries" and men-midwifes, are with us not so numerous as in many parts of the kingdom; still we have a few whose ignorance and presumption are alike notorious. I know one of these shameless pretenders, who in attempting to divide the frenum of a child's tongue, thrust his scissars far enough to divide a branch of one of the lingual arteries, which brought on a hæmorrhage that destroyed the infant in forty-eight hours! The mother of this infant entertained a vulgar, and for the most part, an erroneous notion, that the child was tongue-tyed, and first brought it to a surgeon with whom I then resided. Upon examination, the frenum appeared naturally and perfectly conformed, but the foolish parent it seems could not be made to believe this.—On another occasion, this man pronounced the presenting part of a "Psoas abscess," a "Bubo!" and immediately set about salivating the sufferer, who was a married

* What is here said, does not apply to the poorest classes, because they are (what is usually termed) "farmed" for a stated salary. It is the inferior tradesmen I allude to; they are not allowed a "parish doctor," of course they pay for medical attendance themselves, though many of them can no better afford it than the husbandman.

married man. The poor fellow was convinced of his own innocence, and had no reason to suspect his wife's fidelity, and not being satisfied with this decision, he some time afterwards applied to several other surgeons, who immediately discovered the error, but too late to afford the man a hope of recovery, as the favourable moment had gone by, and the man's constitution was under the influence of mercury.*

Itinerant quacks are gradually disappearing, but we have many resident "lady doctors," who bountifully dispense "infallible remedies" for St. Anthony's fire, jaundice, sore breasts, &c. Their practice and fame surely ought to be confined to the lower classes, and yet it is no uncommon thing for opulent members of society, (who have little else to do, but to nurse their imaginary complaints,) to resort to this kind of quackery after having exhausted the patience and "skill" of their regular medical attendants.

I think the worst evil of all, as it effects the welfare of society, is the increased consumption of "patent medicines," connected with "domestic quackery." Buchan is the "oracle" which these domestic followers of Esculapius consult; with this book as a guide, parents do not hesitate to administer medicines to their children, servants, and dependants; perhaps nine times in ten no harm may result, but fatal diseases often make their approach in an insidious manner, and medical advice is only called in time enough to witness the last, but ineffectual efforts of nature; but not time enough to catch the favourable moment when the rapid strides of disease might be arrested, and the sufferer snatched from his impending fate.

Credulity and confidence are the constant companions of ignorance; and the mind is readily captivated by promises, especially if they are couched in ambiguous language. Empirics take advantage of these circumstances, to deceive a credulous public, and find a ready sale for their

 nostrums.

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* I could adduce a parallel instance of ignorance in a youth who left the Borough Hospitals, about twelve months since, after having had all the advantages that the present system of education for a surgeon-apothecary affords. This "self-taught" genius applied a "hernial truss" to a "suppurating bubo!" This is a strong proof that the present mode of education adopted at the public schools in the metropolis, comprising a "general attendance on lectures," is too lax and insecure. The acquirements of the pupil should be ascertained by strict and impartial examinations, that the profession may be secured against the disgrace entailed upon it by the admission of unworthy members.

nostrums. They also receive the sanction of the legislature; and one would think they find but little difficulty in obtaining "noble" and "dignified" attestations to "surprising cures." That men of the first rank and preferment in society, should condescend to prostitute their names, to answer the sordid views of individuals, to the injury of the community, is a matter of astonishment as well as regret to your humble servant,

AN ESSEX PRACTITIONER.

February 7, 1810.

P. S. From the reputable testimonies adduced in your Journal respecting the medicinal powers of cobweb, I was determined to give it further trial, when opportunity offered; a few days since an inveterate ague presented itself. The patient had laboured under an irregular intermittent for many months, which at last assumed a regular quartan form. I prepared these pills, each containing five grains of the most recent webs that I could find, after a careful search. I directed the patient to take one of these pills at intervals of two hours, managing so that the last should be taken about half an hour before the expected fit. The man obeyed my directions punctually, but unhappily for him obtained no relief or abatement in his disorder, and the only effect he could attribute to the pills, was a pain in his bowels.

Since writing the above, I received a letter from a friend at Edinburgh, in which he informs me, that Dr. Gregory and the College of Physicians are at variance from an extraordinary cause. The Members of the College wish to make up their own prescriptions! This Dr. Gregory refused to accede to with scorn, and he is about to publish his reasons, or defence. I hope we shall soon hear more of this subject.

MR. PECK'S OBSERVATIONS ON THE LEECH WORM.

Changes that I have observed in the Animal before any particular Alteration of the Weather.

1. WHEN the leech lies motionless at the bottom of the glass, and is frequently in a spiral form, the weather in summer will be serene and beautiful: the same denotes clear frosty weather in winter.

2d. If

2. If it creeps up to the top of its lodging, it will rain within twenty-four hours in summer, and snow in winter.

3. When the leech gallops through its limpid habitation with swiftness, it denotes wind, and seldom rests until it blows hard.

4. When the leech lodges almost constantly out of the water, and discovers uncommon uneasines in violent throes and convulsive-like motions, a storm of thunder and rain will succeed.

Method of keeping Leeches.

1. Put a few into an eight-ounce phial two-thirds full of spring water, with some fine sand or moss at the bottom. As the leeches have no other evacuation but through the pores of the skin, which passes from them in perspirable matter, and adheres to the body in the state of slime, which, if not timely removed, prevents these evacuations, and causes the death of the worm; the use of sand, or moss, is, that it may rub the slime off its body, which afterwards floats in the water. Over the top of the phial tie a piece of leather pricked full of holes to admit air.

2. The water must be changed once a week: spring water is the best. Sometimes it is necessary, when there is a great change of temperature between the water and that contained in the phial, only to put half or two-thirds of the fresh to the other. Leeches should be kept in a cool situation in summer and a rather warm one in winter.

3. The leeches that have been used for bleeding should be kept in a separate phial till they appear perfectly well.

Directions for using Leeches in Bleeding.

1. It is necessary to clean the skin from any foreign matter * that may have been applied or adheres to it, with soap and water: afterwards rub it dry with a clean cloth, as liniments, &c. which are frequently applied in cases of bruises, or sprains, prevent them from taking hold, and if any do so, they die: any part where hair grows must be clean shaved, to prevent the hair from annoying them. These are precautions that are necessary.

2. When leeches are applied, the patient should be in as horizontal a position as possible. Then take a wine or any other glass large enough to give room for the quantity that it is wished to take hold at once, being much better than

* Such as the limentum saponis, solutio ammoniæ volatilis, &c.

than the fingers; it gives the worms free motion in their circumscribed limits, retains them in their proper place and supports them from falling. The glass should be reclined on one side to admit a free access of air. The leeches should be chosen large, to answer their purposes the more effectually. When they seem sufficiently filled, a small portion of salt should be put to their mouths, which will cause them to fall off, being better than taking them with the fingers, as it bruises them.

Treatment of the Leeches after they are satiated with Blood.

Place the leech on a clean plate; take a little common salt rubbed fine, about the size of a pinch of snuff, and place it in contact with the mouth of the worm; it will remain a short time in a state of torpor, after which it will disgorge part of the blood; a little more salt may then be placed near its mouth, repeating it until it is all disgorged, taking care that no part of the salt touch any other part of its body, which blisters, and is frequently the death of the leech. When the worm returns to its natural size, it may then be put into a bason of water; if it has received no injury it will frisk about and appear lively, if sickly, it will sink to the bottom: should this be the case, place it in a separate phial till well. Every leech should have a clean plate to disgorge itself on.

These observations have occurred in practice; and I am convinced that if they are strictly attended to, the mortality amongst leeches will be much lessened.

N. B. Those who wish to use a leech as a weather-glass, should choose one that has not been used for bleeding; for after they have been used they are frequently sickly, and will bury themselves in the sand for days together.

On Expectorated Matter. By George Pearson, M. D. F. R. S.

(Abridged from the Philosophical Transactions for 1809.)

"THE attention of physiologists has been very much withdrawn, for the last half century, from the consideration of the different states of the circulating and secreted fluids, in consequence of the opinion that the nervous and fibrous, or muscular systems, can afford satisfactory interpretations of the phænomena of living beings; and on ac-

count

count of the disgust produced by the visionary properties and groundless hypotheses, originating in the humoural doctrines of Galen. But late experiments have manifested, that various things taken into the stomach can be made at pleasure to produce considerable effects, by impregnating sensibly the blood and urine, as well as the milk, sweat, and perhaps saliva. Further, the fine experiments of Professor Colman have shown, that the contagious glanders may be excited in the ass, by the transfusion of the blood of a glandered horse, and the matter from the nose of the glandered ass can produce this disease in the horse or the ass.* Hence I apprehend it is reasonable to expect, that the further investigation of the properties of the animal fluids will afford gratifying instruction to the researcher in natural science, and important practical information to the physician.

"On the present occasion, I desire the honour of communicating the knowledge I may have acquired, by investigating the properties of expectorated matter secreted by the bronchial membrane. The appearances of this substance serve to regulate the judgement of the physician concerning several diseases of the lungs; but especially of that of pulmonary tubercles, which yearly destroys 120,000 to 140,000 subjects of the United Kingdom. It is fit that I remark, that I do not notice in this paper the ingenious experiments of several learned chemists; because by so doing I should be led into a detail of too great extent for my design.

"The numerous varieties of expectorated matter, according to my observation, may be arranged and characterized under the following seven heads:

"I. The jelly-like semi-transparent kind of a blueish hue, excreted in the healthy state.

"II. The thin mucilage-like transparent matter, so copiously expectorated in broncial catarrhs.

"III. The thick opaque straw-coloured, or white and very tenacious matter, coughed up in a great variety of bronchial and pulmonary affections; especially in that of tubercles.

"IV. Puriform matter secreted without any division of continuity, or breach of surface of the bronchial mem-

* Mr. Colman alleges, that there is not a sufficient quantity of blood in a single glandered ass, to excite the glanders by the transfusion of blood into the horse.

brane, very commonly occurring in pulmonary consumptions.

" V. The matter which consists of opaque viscid masses, together with transparent fluid; or the second sort above stated, with nodules of the third or fourth kind.

" VI. Pus from the vomicæ of tubercles.

" VII. Pus from vomicæ by simple inflammation of the lungs, and without tubercles.

" Other kinds of matter are occasionally coughed up, such as calculi—masses of self coagulated lymph—serous fluid—blood itself—and perhaps the vascular substance of the lungs; but I do not write on these matters, because they either do not belong to any particular recognized disease; or they are rare occurrences in some well known disease, and are too obvious to require description.

" § I. *Sensible or obvious Properties.*

" 1. *The jelly-like matter,* as already said, is excreted in the best health, as well as sometimes in disease. It is mostly coughed, or hawked up in a morning soon after a night's repose, during which it seems to accumulate. A few masses, or nodules, then appear of the consistence of jelly, and of the size of a pea to a hazle nut. It is also at any time liable to be excreted, in consequence of various extraneous matters irritating the fauces, to the amount of a few nodules .It is of a greyish colour, or inclining to blue, with black specks; and it is rarely whitish in nodules. The consistence is that of jelly, but of much greater tenacity. It has a barely perceivable taste of common salt, or muriate of soda. It commonly floats on water, but by agitation to disengage air bubbles, it sinks. It has no smell. To the naked eye, or assisted by a single magnifier, this matter seldom appears uniform, but consists of a mixture of opaque and transparent masses of irregular figures. With the compound microscope, spherical particles were perceived, though few in number, when duly diluted. The presence of an alkali I could in no instance perceive, by means of the usual tests, namely, turmeric paper, litmus paper slightly reddened by vinegar, and cloth stained with violet juice; nor was an acid denoted by means of litmus paper, except when I had reason to believe it was derived from various acid substances taken with the food, or drink, adhering to the inside of the mouth and fauces.

2. *The mucilage-like expectorated matter,* according to my observation, occurs much less frequently than the other

other sorts. It appears suddenly in great abundance in certain bronchial catarrhs. I have seen it to the amount of two or three pints in twenty-four hours. It is also secreted, but less copiously, in paroxysms of spasmodic asthma, and of the hooping-cough; and but rarely in pneumonic or pleuritic inflammations, and in some chronical organic diseases of the heart and lungs.

"This matter is a transparent uniform fluid of the consistence of white of egg; or of a mucilage compounded of about one part of arabic gum, and four or five parts of water. It is colourless—has a fleshy smell—has a brackish taste. After standing eight or ten hours, a deposit takes place of fibrous, leaf-like, or curdy masses, some of which are seen suspended in the clear fluid. In some cases nodules of opaque thick ropy matter, at certain times, accompany this mucilage-like matter. Under the simple magnifier I perceived irregular figured masses partly in motion and partly suspended. With the microscope, globules were seen; but larger considerably than those of the blood, and much less numerous. With the usual tests there were no indications of alkali nor of acid, provided the matter was unmixed with other things. It usually floated, or was suspended in water, when first expectorated; but on standing in the water it fell to the bottom, evidently owing to the disengagement of air-bubbles.

"By standing exposed to the air in warm weather, it sooner grew fœtid than pus of abscesses; without becoming opaque. Neither could I render it opaque or thicker, by exposure to a stream of oxygen gas for an hour; or by exposure of it in a jar of this gas for a month.

"3. *The opaque ropy matter* above mentioned.

"1st. It is secreted most copiously in that very common, and extensively epidemial disease of our climate, the *winter-cough*, occasioned by tubercles, to the amount of half a pint to a pint in twenty-four hours; especially during the winter season for several successive years, and sometimes during the whole of a long life, after the age of forty or fifty years. 2dly. It is often the expectorated matter of the pulmonary consumption of young persons, also occasioned by tubercles, but frequently mistaken for the pus of abscesses or vomicæ. 3dly. It appears, oftentimes, in pneumonic or bronchial inflammation with fever, seemingly being a beneficial discharge; as well as in some instances at the close of a fever without concomitant inflammation of the lungs. 4thly. A severe paroxysm of spasmodic asthma is often terminated in the excretion of

this

this kind of matter. 5thly. A secreted substance of this sort is sometimes expectorated in various chronical organic diseases of the lungs, the heart, aorta, and parts contiguous to the lungs, which occasions difficult transmission of blood through them.

"In all these instances the matter by expectoration is of the consistence of thick cream, or of thin toasted cheese; so tough as to hang in the form of a rope, four or five inches in length, on pouring it from one vessel into another. Its aggregation is such that it is readily detached in large masses from the vitreous surface of vessels. It is not unusual for small black, or reddish spots, and streaks, to appear on the surface of this sort of expectorated substance. A pretty large bulk of it is seldom throughout uniform; but it is frothy, and exhibits opaque masses of various hues with transparent matter interposed. The colour is yellowish, straw-coloured, and white, or grey; it also, though seldom, is greenish and blueish. The taste asserted by patients, is, in their own terms, various, namely, saltish, nasty, faintish, sweetish, luscious, or like that of a sweet oyster,—a sharp or sour taste is the most rare. The only smell which I have perceived is that of flesh, but very frequently there is none. When any offensive or pungent smell was perceived, immediately after expectoration, I have always found that it was owing either to the foulness of the vessel in which it was received, or it was from extraneous matters in the mouth, and from decayed teeth.

"This opaque viscid substance, being duly diluted with distilled water, was examined with microscopes of common as well as of very great powers: by means of any of them, crowds of spherical particles were seen passing to and fro in currents, not unlike those of the blood; except that they were larger. These globules I could not destroy, nor alter in form, by trituration; nor by long boiling in water; nor by exsiccation, and again dissolving in water; nor even by coagulation with mineral and vegetable acids, with alcohol, with sulphuric ether, or with tannin, and alum; nor by mixture with caustic alkalies in a proportion which leaves the liquor turbid; nor for some time after the putrefactive process had appeared. But these globules disappear with such a proportion of sulphuric acid as detaches charcoal; or of nitric acid, and of liquid potash, as produce a clear solution; also by charring by fire. It is perhaps superfluous to remark, that these atomic globules are quite different from the air bubbles usually entangled in

in this kind of matter, as perceived by the microscope; the latter differ much from the former, in being of far greater magnitude—in being less numerous—in being transparent, and on disappearing on agitation, or heating the matter, or even by mere standing.

"For the most part this expectorated substance swims on water; but by agitation or stirring to disengage air bubbles, or by merely standing, it sinks. Some of the lumps suddenly hawked up, immediately fall to the bottom of a vessel of water. No signs of either acid or alkali, appeared on the trials of this matter with well known reagents, provided it was free from extraneous matter; but it was apt to betray acidity from things taken with the food or drink.

"4. *Puriform matter.* I have seen this matter expectorated in several diseases in the quantity of two or three ounces to half a pint in twenty-four hours, on some rare occasions, without any breach of surface. I believe it would be considered by every one to be *pus*, having the properties commonly admitted to be those of this substance. It will, however, perhaps, only be just to call it *puriform*, for the present, as it appears to me probable, that I shall hereafter be able to show that it possesses properties not belonging to pus of abscesses, although in the obvious, or sensible properties, it is similar to such pus. Accordingly this expectorated matter is not only opaque, white, or yellowish, and thick as the richest cream, but it also has not more tenacity than cream. It is not apt to entangle air, and therefore it immediately mingles with water, rendering it milky; and presently subsides to the bottom, leaving the water clear, or at least whey-coloured. It appears to the naked eye uniform in its texture; and nearly so under the simple lens; but under the microscope thousands of globules similar to those of the blood are seen, which are indestructible as those above related belonging to another kind of expectorated matter.

"The substance, of which I am now speaking, is most frequently excreted in the latter stages of pulmonary phthisis, for many weeks successively. It is taken for granted that this matter is from a breach of surface or ulceration; but on examination after death, such a state was not found, in many instances, under my observation, although the lungs were as usual full of tubercles and vomicæ. This puriform matter is occasionally expectorated in certain other diseases. The last summer my colleague, Dr. Nevinson, furnished me with several ounces of this sort of substance,

substance, but of a greenish hue, and of the consistence of thin cream; which was expectorated by a woman in the third week from the attack of the measles. In a few days she died. On examination of the lungs very carefully, by the excellent house surgeon of St. George's hospital, Mr. Dawes, no ulceration could be discovered in the trachea or in the bronchial tubes; nor were any tubercles or abscesses found in the lungs. The patient, according to my information, had expectorated more than a pint of this fluid every twenty-four hours for a week before death. In another hospital case, a man laboured under a cough with spitting of matter, which all who saw it called pus, and as usual it was considered to arise from an ulceration, or suppurated tubercles; but, on examination after death, the disease was ascertained to be condensation of the lungs, to the consistence of liver, with water in the cavities of the chest, and nothing more.

"5. *Opaque viscid matter of a third, and perhaps fourth sort*, above distinguished, appearing in nodules, and irregular-figured masses, *mixed with transparent slimy matter of the second sort.*

"It is not unusual to see the mixture of these two different kinds, from severe fits of coughing in that constant epidemy of the British islands, the winter chronick pneumonia.

"Different parts of the bronchial membrane being in different states, may account for the secretion of the two different matters. This seems more probable than that these different matters should be secreted from the same part; although it is true that the same part does secrete at one period transparent thin slime, and at another an opaque thick matter. The former is occasioned by great irritatiou of the membrane, and the latter is the effect of a more gradual secretion with much less irritation.

"For the sake of brevity, I avoid a further description. The practical application of these observations, however important, would not be suitable in this place.

"The sixth and seventh kinds of expectorated substances being secreted after a quite different manner, and being very different in their nature from the preceding five kinds, I shall not give an account of them in this paper."

[The author then describes at large, and with much precision, the effects produced on expectorated matter by the agency of caloric; of alcohol of wine, of water; and of acetous acid—also some experiments with different objects from any of these; but we confine the remaining part of the

the present extract to his *Conclusions*, as containing that kind of information which will be most acceptable to the generality of our readers.]

"*Conclusions.*

"1. From the preceding experiments and observations, and from others which I might have related, it does not appear that the various kinds of expectorated matter, page 215, differ in the ingredients of their composition, but merely in the proportion of them to one another.

"2. It has been shewn that expectorated matter consists of coagulable, or, as it is also now frequently termed, *albuminous* animal substance, and of water impregnated with several saline and earthy bodies;—that the largest proportion of the animal substance, which may justly be called an oxide, amounts to one twelfth, and in some very rare cases to one-tenth of the expectorated matter, reduced to a brittle state by evaporation; and that the smallest proportion of this oxide, in rare instances, amounts to one forty-fifth of the expectorated matter; but that the usual proportions of it vary between one-twentieth and one-sixteenth of this coagulable oxide to the evaporable water, that is, between five and six per cent. of the expectorated matter.

"3. The impregnating substances have been shown to be muriate of soda, varying commonly between one and a half to two and a half per 1000 of the expectorated matter—Potash varying between one-half and three-fourths of a part per 1000—Phosphate of lime about half a part of 1000—Ammonia, united probably to the phosphoric acid; phosphate, perhaps of magnesia; carbonate of lime; a sulphate; vitrifiable matter, or perhaps silica; and oxide of iron. But the whole of these last six substances scarcely amounting to one part in 1000 of the expectorated matter, it would be useless to estimate the proportion of each of them. It is very probable that the proportions and quantities of these ingredients vary much more than now represented in different states of disease and health.* It is very probable also, that some of the ingredients may occasionally be absent, and others of a different kind be present, agreeably to

* In one case, the opaque expectorated matter in a pulmonary consumption, having been exsiccated to brittleness, became almost liquid after a night's exposure to the air.

to the different states, on different occasions, of the other secretions.

"4. It is manifest that the different states of consistence of expectorated matter are owing to the proportion of albuminous or coagulable oxide; but I purposely avoid giving an account of the different conditions of health, on which the differences of consistence depend.

"5. The thicker the matter, the smaller I commonly found the quantity of saline impregnation. Hence, in sudden and copious secretions of the bronchial membrane, the matter is asserted to be salt, and to feel hot. In such instances, the proportion of coagulable matter was small, but that of the saline impregnations, particularly of the muriate of soda, and neutralized potash, so great, that the exsiccated expectorated substance tasted very salt, and presently grew moist, or even partially deliquesced; but the opaque ropy or puriform matter afforded a much larger proportion of exsiccated residue, which was but slightly salt, and generally only became soft on exposure to the air. This property of growing moist depends upon the potash.

"6. Each of the human fluids, according to my experiments, contains neutralized potash; at least, this is the fact of the blood, dropsy fluid, pus of abcesses, and pus secreted without breach of surface; the fluid effused by vesicating with cantharides; the urine; and in course in the very abundant secretion from the nose by a catarrh. The alkali being united to oxide of animal matter in these fluids, it is easily demonstrable.

"7. Although I think I have discovered many properties by which expectorated secretion may be distinguished from expectorated pus, I shall not speak of them, on this occasion, further than just to observe that the saline impregnation of pus, particularly that of potash, and muriate of soda, is in very much less proportion than in expectorated secretion; and hence it does not become moist after exsiccation, on exposure to the air.

"8. It has been, I believe, uniformly asserted, that the circulating and secreted fluids are impregnated with soda; that it is especially in the matter secreted by the bronchial membrane. The experiments of others must confirm or disprove mine. It seems, however, much more reasonable, that the human fluids should be found to contain potash than soda, united to some oxide or destructible acid; because the former alkali is daily introduced with the vegetable food, and with the drink of fermented liquor; and it is

is as little likely to be destroyed, as the muriate of soda also induced in the very same way. But our food and drink do not, commonly at least, contain the soda united to a destructible acid, or an oxide.

"9. It is plain, from the preceding experiments, that expectorated matter belongs to the class of coagulable fluids and not of gelatinizable, or, as commonly asserted, mucous fluids. It differs from the coagulable fluid, serum of blood, in forming a much thicker fluid with a much larger proportion of water: for serum, and also the water of blisters, is quite liquid, although they afford, on exsiccation, one-twelfth to one-eleventh of their weight of brittle residue, while some kinds of expectorated matter, of the consistence of mucilage, afford only one-fortieth of dry residue, and others of the consistence of thin paste afford only one-fourteenth of residue.

"10. But for the unavoidable extent of this paper, I should trouble the learned Society with various other conclusions and remarks, especially concerning the *globularity* of expectorated matter, which seems to indicate organization. Although Antonius Van Lewenhoeck, above a century ago, discovered the globularity of the blood, and even noticed it in other animal fluids, neither he, nor any other person, as far as I know, investigated the subject in any fluid but the blood, till, by Mr. Home's acuteness and industry, at a very early period of life, it was observed in pus. I have in this paper related, that expectorated matter, especially the opaque ropy kind, as well as the puriform, is full of globules; and that, except by such agents as destroy charcoal, they are scarcely destructible. Do these spherical particles consist chiefly of organized carbonaceous matter?"

To Dr. ADAMS.

Dear Sir,

An erroneous opinion having been entertained in the neighbourhood where the following Case occurred, that the patient died of Hydrophobia, I think it may be proper to insert in your Journal the account Mr. Wakefield, who attended her, has sent me of the disease, and to subjoin the appearances on dissection.

Sir,

"Sir,

"ON the 16th of December, Ann Fidler, No. 14, Union Place, Battle Bridge, received a lacerated wound on the face from the bite of a large dog, which we supposed was not mad, from his remaining tearing the child, until a man with difficulty drove him away. The wound healed kindly, and she remained perfectly well until the 2d of February, when she had an attack of fever, attended with sickness at the stomach, which an emetic removed. On the following days, that is, to the 6th, the fever continued with but little sickness, but attended with general pain in the limbs and head, for which she was taking saline and antimonial medicines. On the 6th she complained of violent pain, attended with sickness. I applied a blister, and on the 7th found the head much relieved; but a sudden difficulty of swallowing came on, insomuch that every thing she attempted to swallow, instantly returned by the nostrils, but unattended with any dread at the sight of liquids. In the evening her existence was suddenly closed, as if by suffocation. There was delirium at intervals during the whole of her illness.

"I am, Sir,

"Your obedient servant,

"THOMAS WAKEFIELD."

I saw this girl, at the desire of her parents, in the afternoon of Wednesday the 7th of February, which was the last day of her illness. There was then no appearance which indicated the approach of dissolution. She was sensible; her pulse about 120, regular, and tolerably strong. I desired her to drink some liquid which was in a cup by the bed. She took it into her mouth, and endeavoured to swallow it, but it was instantly thrown back with a considerable quantity of mucus. The attempt to swallow was however made without any repugnance, and the failure of that attempt evidently arose only from absolute inability to exert the muscles of deglutition. I examined the throat, and found the left tonsil, and the arch of the palate on that side, a good deal enlarged; but not sufficiently to explain the difficulty or rather impossibility of swallowing, which her mother distinctly stated had only come on late on the preceding day.

I was much surprised when I was informed she had died suddenly that very evening, especially as there had not been the smallest difficulty of respiration. The parents and

nd myself were equally desirous that the cause of her death should be ascertained by dissection; I therefore examined the body on Friday the 9th instant, in the presence of Mr. Wakefield and several other medical gentlemen.

I first of all took out the larynx, pharynx, and tongue, *en masse*, in order to ascertain the state they were in, with as little disturbance as possible. The posterior half of the tongue was swollen, and the fungiform papillæ appeared in consequence much larger than usual. The glottis was closed completely, and the larynx filled, by a quantity of viscid, glairy mucus, which it was rather difficult to detach, and which had evidently been the immediate cause of her death, by falling down and producing suffocation, for there was no mucus whatever found in the trachea below the larynx, or in its branches, nor was the inside of the larynx itself inflamed. The pharynx showed slight marks of inflammation; and on laying open the œsophagus, the inflammation appeared to have increased in regular gradation from its upper part to its termination in the cardia, where it was coated by a layer of coagulable lymph; and from about an inch above its termination, at the posterior part, was completely gangrenous, and tore with the slightest force. The appearance of inflammation extended into the stomach for about two inches round the cardia, chiefly however on the posterior part, in a continued line from the gangrened œsophagus.

The stomach contained a considerable quantity of acrid matter, tinged with bile. I never recollect to have seen a stomach so generally eroded by the gastric juice in so short a period after death.

The brain was in every respect healthy; and no fluid whatever effused, either between its membranes or within the ventricles.

There was something peculiar in the effluvia from this body, which though not offensive from putrefaction, yet gave me and one of my pupils a severe head-ach, which continued till the next day.

I am, &c.

T. CHEVALIER.

South Audley Street, Feb. 16, 1810.

Case of Hepatic Affection. By Dr. Crawford *of Baltimore, America.*

[Communicated to Dr. Bradley by Dr. R. J. Thornton.]

Mr. P. aged above 50, short, fat, a large head, and rather florid, came to this city from Norfolk, in the beginning of October, 1807; he lodged at the Indian Queen. I was sent for to visit him on the 13th, at 4 P. M. He was suffering from excessive pain in the hepatic region, extending to the parts in its vicinity, attended with nausea, and he had been some time without an alvine evacuation. His pulse was small and quick; ordered a saline purgative, which operated copiously, and afforded him sensible relief.

At noon, finding the febrile action still continue, notwithstanding the freedom with which the bowels were emptied,

℞. Camphoræ ℈j. spt. nitri dulcis ʒj. m. cochl. parv: pocillulo aquæ tepidæ edulcoratæ quaque hora sumat. This created no disturbance in the stomach, and in the evening the fever considerably remitted; at 10 o'clock P. M. he was free from uneasiness.

14th. He had a good night, but awoke this morning with a return of the uneasy sensations in the abdomen.

℞. Calomel. camphoræ aa ℈j. Pulv. antimon. ℈ss. Pulv. rhei ʒss. m. fiat pil. 16. æquales. Cujus capiat duas 2nda quaque hora donec alvus responderet mitte spt. nitri dulcis ℥j. cochl. parv. quaque hora sumat.

At noon he had taken eight of the pills, all of which were retained; the pain in the epigastrium distressing, and the pulse was quick and small, repr. mist. salin. ut heri addendo tinct. opii compos. ℥ss.

He continued all the afternoon to increase in suffering from the pain in the epigastrium, and began to despond of life, having a constant *jactatio*: obtained only three small inefficient stools, although the mixture was quietly retained in the stomach. At 7 P. M. Dr. Littlejohn was called, and proposed venesection, from which, perhaps, I had been too much deterred by the smallness of the pulse. Eight ounces were taken from the arm. It was of a dark modena red, as it flowed from the orifice. The pulse soon after rose considerably. We gave him immediately afterwards a double dose of the saline mixture; but this was rejected. We had then recourse to ol. ricini, which remained, and in a short time operated freely. At 10 P. M.

we

we found him much easier, the paroxysm having gradually diminished and terminated by a gentle diaphoresis.

15th. We visited him at 7 A. M. He suffered much in the night from affliction in his abdomen; had since last evening several small stools without relief. We repeated the ol. ricini; by noon it had operated, but effected no benefit.

℞. Cal. ʒss. pulvs. opii gr. 3. m. f. l. a. pil. 6 æqs. unam 2nda quaque hora. S. Ordered an emollient enema, and warm salt in a bag to be applied to the part affected. At 4 P. M. some evacuations had been procured; but no diminution of suffering. The two first pills gave no disturbance. The third became so offensive he could not retain it. We agreed to give him the following purgative.

℞. Pulvs. jalapii. calomel. aa ℈ss. Sacchari ʒss. m.

This proved acceptable, and operated sufficiently, assisted by another enema. About five, the paroxysm which had endured from an early hour yesterday morning, twenty-four hours, with scarcely any abatement, now remitted, and he fell into a profound sleep. In this he continued until nearly 10 P. M. but alas! he again awoke, having a return of suffering; his pulse was 108, and no way diminished in strength, although he had been copiously purged. We endeavoured to alleviate his pain by diaphoretic anodynes, which, about 11 P. M. procured him a comfortable sleep, which continued until morning; but he awoke to a renewal of torment.

16th. At 6 A. M. the paroxysm recommenced. We repeated the saline mixture with the neutral salt; but this was not retained; we then gave him the same with cold infus. flor. cham. with no better effect. Ordered the pulv. jal. and cal. as before, which operated well; at 7 P. M. the pain was excessive; repeated the enema, and ordered an anodyne embrocation with volatile alkali.

17th. Had a restless night; a slight remission towards morning. Repeated the saline mixture; this occasioned flatulence; administered it with acid. mur. dilut. loco acid. limonum, which proved less offensive, and applied the anodyne embrocation diligently; pulse always soft, and ranged from 104 to 108; evening, having had no stool, repeated the enema.

18th. Again a bad night. The paroxysm had recurred with additional vehemence, and the pulse felt fuller than before; we ventured to take off about six ounces of blood, but an immediate failure of strength admonished us to desist. He continued very weak for several hours. When

the reaction was restored, his eyes evidenced an approaching delirium. At 1 P. M. he was completely deranged, and incapable of articulation; we applied epispastics to his ancles and the nape of his neck.

19th. Had a very restless night; this morning more composed; the epispastics operated effectually; having more evidence of apyrexia, we ordered a decoction of cinchona, which he took without inconvenience. At 1 P. M. he was able to pronounce a few words; we applied epispastics to his arms. In the afternoon he coughed with some energy, and brought up some matter that was very offensive in smell, and resembled pus. We gave him the decoct. cinchonæ with wine freely. At 7 P. M. he was nearly restored to speech, and complained of a more acute pain to the right of the scrobiculus cordis than he had yet experienced.

20th. Had a tolerable quiet night, and was this morning perfectly sensible, and in the full possession of his speech; he desponded of recovery, and suffered much from the pain in the right epigastrium, but felt no inconvenience from lying on one side more than the other, nor was there any affection of either shoulder, such as accompanies an adhesion of the peritoneal coat of the liver to the intercostal muscles, or the parietes abdominis. The blisters on the extremities were dry, but that on the neck discharged freely. His pulse was weak, soft, and quick, and the debility was great. We continued the decoct. cinchonæ with wine, both of which proved very acceptable, and he used them unsparingly.

Evening, no abatement of any symptom, and a slight subsultus tendinum was perceiveable. The disease from this time until the twenty-third, proceeded with no other variation than is usual in the progress of such affections. He continued the decoction with wine; his bowels were kept open by enemas, and small portions of rhubarb were occasionally added to the doses of the decoction, with the desired effect. At 1 P. M. of this day, he had a smart rigor, which was succeeded by a higher degree of pyrexia than he had yet experienced. In the evening he was again deranged, and had two copious stools, by which he was much sunk. Whilst the pyrexia was advancing to its height, there was a strong pulsation in the epigastrium; that at the wrist was weak, and had an oscillation, which usually marks the formation of pus.

Being now satisfied that an abscess was forming, if not already formed in the superior gibbous part of the large lobe

lobe of the liver, it became a question whether an opening was not immediately adviseable. We were pressed to undertake it by the patient, as affording the only possible means of saving his life, but were deterred from it by the following considerations.

The seat of pain was not confined to a particular spot, but occupied an area of, perhaps, more than an inch in diameter. There was no pain as before-mentioned, in either shoulder, and from these circumstances, no proof could be obtained that an adhesion existed between the liver and the external parts of the abdomen, which must be cut through to come at the abscess. Suppose these parts divided, and issue afterwards given to the contents of the abscess, wherein would the matter be received? The canula of a long trochar might, it is true, convey the principal part of it out of the body; but assuredly no small share would be admitted into the adjacent cavity. How far this would have defeated our purpose of remedying the disease, it is impossible to determine, but it certainly appeared to be too hazardous an undertaking. I have already stated, in my communication to you, on the seats and causes of disease, that in the Demerary hospital, I had often found an abscess in the internal parenchymatous part of the liver, where no adhesion to any of the surrounding parts was to be discovered. This strikingly appeared to be of the same description, and seemed to deny every hope to my mind, of the case being within the reach of human aid, we therefore declined the operation.

24th. The fever abated towards morning, when he obtained some quiet rest for several hours. About noon the paroxysm re-commenced, and continued increasing with great suffering through the whole day. Calomel camphr. and nitre in powders were administered, and quietly retained. This paroxysm was not ushered in with a rigor as yesterday; but 25th, was called to him this morning at four, when it recurred with great violence, to which a corresponding pyrexia supervened; a mercurial purgative was given, to open the bowels; an enema became requisite to effect this purpose. The fever abated towards evening; from its commencement the pain was very acute, still in the same situation. The pulse corresponded with the other symptoms. The fæces, of which he had two or three evacuations, were of a dark colour, and very offensive; this suggested a full dose of oleum ricini.

26th. No rest again until morning; the febrile action was less vigourous the whole of this day; the oil given last

night

night did not operate; gave him a dose of calomel and jalap, but this was rejected. Appeased the irritation of the stomach by small and repeated doses of a solution sal. marin. in gruel, which, as I have often experienced, more effectually answered the purpose than perhaps any other means that could have been adopted; had no stool the whole of this day; towards evening he sensibly revived, the pulse was tranquil, and he felt stronger than since the commencement of the disease; this was a more marked intermission of suffering than had hitherto been noticeable; although a little attention to the foregoing account will evince that the malady, from its commencement, assumed, more or less, of a tertian type.

27th. Passed the night with little disquietude. The cathartics he took yesterday began to operate early this morning; either from this, or from some unusual exertion of the offending cause, he was purged smartly, and in consequence the pulse was much reduced; gave him preparations of the cinchona freely. Towards evening the perturbation of the system was renewed; and the matter expectorated, which had never ceased to be in large quantity, was tinged with blood; the cough was pertinacious all the evening.

28th. Some rest as usual towards morning, but the morbid distress was this day increasingly severe; the expectoration was more abundant than before, and still tinctured with blood.

29th. The febrile action was very little diminished the whole of this day; the matter expectorated, increased in quantity, was thinner, and instead of a sanguineous, was of a brown appearance. He complained less of pain, but there was a more circumscribed spot, of which, on pressure, he complained more than before. This was some inches anterior to the costæ. We had now a more marked proof of adhesion than had hitherto solicited our attention, but still insufficient, in our opinion, to warrant an operation, especially in so advanced a stage of the disease.

30th. Some sleep as usual towards morning, but also as usual, he awoke to renewed suffering. The sputation was again deeply coloured with florid blood, and in such quantity as to evidence great depredation in the seat of disease. In the evening, debility much increased, and his pulse became very feeble.

From this time to the period of his death, nothing unusual occurred, except that on the 3rd of November, he expectorated, with the pus, a substance of a fleshy appearance

pearance as large as an almond. He expired on the sixth, the collection of pus, apparently in the thorax, and his incapacity to evacuate it, seeming to effect strangulation, and thus terminate his existence.

I sincerely lament that we were not allowed to examine the body after death; such diseases seldom occur here. To have ascertained whether any adhesion had been formed, so as to have made an incision safe, must have been an important acquisition. That an adhesion existed, when the seat of pain was at the advanced period of the disease more circumscribed, became sufficiently manifest, and that it was so situated, at the anterior part of the hepatic region, and clear of even the cartilages of the costæ, must have rendered an operation there perfectly safe. But repeated opportunities, both in the East and West Indies, of seeing issue given to the matter, when thus circumstanced, and unacquainted with any successful termination, I was deterred, at such a state of the malady, from countenancing the measure.

I was afterwards informed by very respectable medical connections of the patient, that the disease is not unfrequent at Norfolk, Virginia, and is there termed "Hepatic pleurisy." The appellation is certainly characteristic of the symptoms that occurred in this disease, but these do not fully correspond with what authors describe concerning it.

The symptoms adduced by Bianchi, in his Historia Hepatica, vol. I. p. 235, are "an acute fever with a pulse rather hard, difficult breathing; bloody sputation; a deep seated pain in the inferior part of the thorax, on the right; a very florid colour of the right, much more than of the left cheek. An icterical appearance of the whole surface, particularly of the eyes and tongue, and of all the secretions, especially of the urine, which is of a deep yellow colour. There is an intense dryness of the tongue and fauces; a very bitter taste in the mouth, and an insatiable thirst. Bile is constantly perspicuous in the sputation, and mixed with blood. An obtuse pain descends lower than the false ribs on the right side, a light pressure on which is complained of severely. Here a tumefaction is readily felt, occupying as much of the liver as in life is subjected to examinatiou, which is hard and circumscribed. There is in that part an intense heat; a constant jactatio supervenes; and from the beginning, the thirst, the sense of heat, dryness of the fauces, and arridity on the whole surface of the body are, importunate."

The circumstances wherein our case differs from the above, is, that the icterical appearances were not observable until an advanced stage of the disorder; the seat of it was much higher up; no tumefaction was discernible; there was no difference of colour between the right and left cheek; both were very florid during the paroxysms. The intermissions with us were of short duration it is true, but sufficiently marked, and are not noticed by our Author. The urine, as with him, was never of a deep yellow, but towards the close of a very red colour; in both, the lateritious sediment, which he mentions elsewhere, occurred, and was first discovered in our patient on the sixth day, although it might have happened earlier. It is certain that the blood in the sputation was not, in our case, discoverable until the fourteenth day. In every species of pleurisy, I have uniformly observed, that an early appearance of blood in sputation, before matter was formed, proved a favourable omen; but if it were deferred till pus was manifested, the greatest danger might be apprehended. This is conformable to the aphorism of Hippocrates, 340, as cited by De Gorter in his Medicina Hipocratica, p. 806. "A sanguinis sputo purissputum, malum." This remark has been made by numerous authors, and may be received as one of the best established medical facts. Towards the close of the disease, nearly all the symptoms enumerated by Bianchi were conspicuous.

I feel unspeakable concern that I did not, when first called, clearly comprehend the nature of the disease. Copious depletion, and an energetic use of mercury, particularly the ointment, might have, perhaps, more effectually prevented the fatal catastrophe. But an insulated case, the smallness and softness of the pulse, and the absence of these pathognomonic symptoms which decidedly characterise hepatitis, were strong obstacles to the adoption of what would have certainly been the most appropriate practice, as circumstances proved when it was too late. The truth of this will not admit of a question; but when we consider the absence of the symptoms, which would have proved a sure guide at the commencement of the disorder, when alone the treatment suggested could have been adviseable; that our patient was at a tavern, a stranger, and that the venesection we made did not accomplish much benefit; some consolation may be derived from these unpromising concomitants; indeed, as the early symptoms were so anomalous, it is little to be wondered that such

measures

measures were not suggested either to my mind, or that of my colleague.

I have been always of opinion, that a history of unsuccessful cases was more capable of enlightening the mind, and leading to a correction of errors, than of those which terminate favourably. They suggest more caution; they awaken more reflection, and they urge to a greater exertion of our own sagacity, and beget a disposition less to depend upon the "ipse dixit" of others. Histories of successful cases have too often, at least, as much of the honour of the writer in view, as of those which are unsuccessful, the advantage of the reader.

I am, &c.

JOHN CRAWFORD, M. D.

Description of Sea Scurvy.

By Mr. J. Howe, Assistant Surgeon of His Majesty's Ship Princess Carolina.

IN the history of this disease, as it is met with on board of ships, it will be found to occur to seamen after living on food deficient of its nutritive properties. They will first complain of inaptitude to motion; shortness of breath on any exertion; debility. On examining the gums, they will be found to have an appearance very similar to that produced by mercury, unaccompanied with spitting; the breath fœtid. On examining the feet and ankles, slight œdema; the tunica conjunctiva shows the blood to be deficient in crassamentum by its want of colour. If the disease runs on, and the person has formerly had sores on his legs and feet, these places will become livid, and soon afterwards break out in the foulest ulcers. The system is now so enfeebled as not to be able to generate new flesh, to repair the injury; however, it may be stimulated until the general health of the system has been first repaired. Bleeding of the gums will, no doubt, sometimes occur before death; but this is only now and then met with in the most inveterate cases.

I saw a case of Scurvy in Guy's Hospital, of a man who had never been at sea; he appeared less debilitated; no œdema; and the blood less serous than in those cases which are met with at sea. The purple spots on the skin, in this case, were very numerous; and there was hæmorrhage

rhage from the gums. Persons most predisposed to this disease, are those who have lately recovered from any other disorder, and where the digestive organs have suffered from whatever cause, as fatigue, cold, &c. No man is proof against the disease, although some will bear the exciting causes longer than others, without suffering in an equal degree.

The exciting cause is living upon food not sufficiently nourishing. This subject has been much canvassed, and some erroneous notions are still entertained on the subject. Our principal food is animal and vegetable. Animal food, under particular circumstances, such as the heat of warm climates, and from hot temperature of the summer solstice in Great Britain, soon becomes putrid; and the stomach loaths such food. In putrid meat there can be no nourishment. From the period of the death of the animal, there is a regular gradation takes place between the time that it is wholesome food and that of its putridity; the degrees between these extremes of animal food is regular, and according to the degree to which it approximates to putridity, it is less nourishing, and consequently more liable to produce scurvy. Some doubt has prevailed whether vegetable food could produce scurvy. Vegetable food is liable to decay, and in its decayed state it cannot nourish and support the system; consequently, the system will fall into disease, from a want of regular nourishment. It is not from putrid animal, or decayed vegetable food being taken into the stomach, from any sympathy or action it has upon the stomach, that scurvy is produced; it is from the want of food that is capable of nourishing the system, on which the lacteals are capable of acting, and fit for the purpose of being converted into blood, which will support the system. Cullen's definition is, " In cold climates occurring after living on putrescent salted animal food, with deficiency of recent vegetable matter; debility, bleeding of the gums, spots of different colours on the skin, for the most part livid, particularly at the roots of the hairs. By taking in such food, the frame becomes debilitated, and the lacteals lose part of their accustomed functions; consequently, may be said to fall into a state of disease. The indications of cure are to excite the lacteals to their accustomed functions, and restore the tone of the system. The acids are found to answer the first indication, by exciting the action of the lacteals; and of these, the citric acid very justly holds the first place. Nourishing food, and that of easy digestion, must be employed

ployed to restore the tone of the system; as the whole of the primæ et secundæ viæ are in a torpid and very weak state."

I think it worthy of remark, that amongst the predisposing causes sometimes may be reckoned despondency, caused by tyranny and oppression; and it will be found in all these causes, the prognostic is less favorable. When men have suffered much from punishments, and fall into disease, their situation is more hopeless, and mortality will be much greater, not only in scurvy but in every other disease.

I have asserted, that in putrid animal food there is no nourishment. Although it has been admitted by some, that the human frame cannot be nourished by putrid animal food, yet it is said that some other animals have the power to change putrescent animal food into nourishing food. I recollect having heard a lecture, read in support of this doctrine: Two pigs had lived in the sewers of the streets of Paris for many months, and there became very fat. But I cannot persuade myself to believe, upon so slight a foundation, a thing so apparently contrary to the principles of nature. In the sewers of Paris, much, no doubt, would float, which the stomach of man would certainly loath, but still be very wholesome food for pigs, as potatoe-peelings, cabbage leaves, &c.; and that which has been too coarse for the delicate lacteals of man, may afterwards prove food for the stronger vessels of the swine; for it is not putrescent food only the lacteals will not take in.

The beef which is supplied to the sailors on board his Majesty's ships when at sea, is meat that has been dead generally twelve or more months; this has been kept from putrefaction by salt: but although this meat is not in the least putrescent, it nourishes not the system equally well with fresh meat; and it may be kept even from putrefaction, until it has lost all its nutritive qualities. According to the nutritive quality of the food, the system is preserved in strength, or falls into disease (scurvy.) The chief vegetable food on which sailors live, is flour and biscuit: what length of time flour will keep before it falls into so much decay that it will not support the system, I cannot say, but I know that a great deal of the flour, served to the men belonging to his Majesty's ships, is in a very decayed state, and is by no means equal in supporting the system in strength with fresh flour. The biscuit which is supplied to the men, is generally eight or more months old;

old; in this state it has lost much of its nutritive quality, and supports the system not so well as new bread; after eight or ten months, bread falls very rapidly into decay.

Sugar is supplied in the quantity of six ounces per week to each man; there has been enough already printed on the subject of the nutritive property of this article, in strengthening and fattening the negroes in the West-Indies, to prove it possesses great nutritive properties. How long sugar will keep before it falls into a decayed state, I know not; but I have seen rotten sugar served out to a ship's company, when the ship has not been eight months absent from England. I do not conceive sufficient care is taken that all those articles which are served to his Majesty's ships, are purchased in that state which will best preserve their nutritive qualities. These articles, after they are sent to the victualler's stores, remain there until all the quantity of the same article in the store, which was on hand at the time, is sent away, and on board. That which has been longest on board is first to be used. All this I conceive to be very right, and mention it only to show the cause that the articles have been so long before they are issued to the men. The navy suffers much less now from this disease than formerly, in consequence of the judicious regulations of the commissioners for victualling his Majesty's navy; and I doubt not, still much more may and will be done for the sailor's advantage.

Why Cullen has made its occurrence in cold climates characteristic of the disease, I am unable to conjecture. The islands in the Pacific Ocean and the East Indies, are of a very warm temperature, where scurvy has brought so many seamen to an untimely grave; I much doubt if it does not oftener occur, and more die from this disease, in warm than in cold climates. It is not necessary that the food should either be salted or putrid, to produce the disease. Salt has no tendency to produce scurvy; and most of the beef on which those persons have been supported, which has produced the disease, has not been putrid; the salt has preserved it from putrefaction, but has not preserved all the nutritive properties of the beef entire.

Bleeding of the gums is considered one character; but many men have died of this disease where no hæmorrhage has taken place from the gums; nor is the skin always spotted. I shall leave nosologists to fix the proper character, and rather point out errors than correct them. The word scurvy has two objections; the one, that it is not expressive of the disease; and the other, that our ears are too often

often annoyed with the application of scurvy to every trifling cutaneous affection;—a term expressive of deficient nourishment would be more proper.

Portsmouth, February 12, 1810.

*** We are very ready to find room for any articles by which we may contribute to the comfort of that valuable class of the community to whom we owe so much. Perhaps our Correspondent is mistaken in his opinion of putrid animal matter; but this is of less consequence, as such is rarely the food of sailors. The preservation of vegetable matter is much more important, and we have often wished for an opportunity of suggesting one simple improvement. Oatmeal is apt to become very soon sour in warm climates. As it is only, or principally, used for water-gruel, would it not be much better to use the whole grain or gritts as they are called? The French biscuit or rusks are also found to keep better than ours, and they have a mode of preserving the cabin store potted. Portable soups too, we conceive, might be given out by the captain or purser, to the men in health, at stated periods, and not merely reserved for sick store. During rain in warm weather, all the men might be taught to raise small sallad from raddish, mustard, or any other seeds, on wet flannel in plates.

CRITICAL ANALYSIS
OF THE
RECENT PUBLICATIONS
ON THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

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(Concluded from our last, pp. 154—170.)

ARTICLE 5.—*Case of a Scirrhous Ovary, in which was found an Adipose Tumour, containing Teeth and Hairs, in a Patient who died in the fifth Month of Pregnancy.* By JAMES MILLMAN COLEY, Member of the Royal College of Surgeons in London, and Surgeon in Bridgnorth.

THIS is an addition to those melancholy cases, which it is at present enough that they are faithfully recorded. In some future period,

riod, an accurate comparison of the whole may lead to rational conjectures, if not to a knowledge of the nature of such præternatural appearances.

ARTICLE 6.—*On the Effects of Arsenic.* By G. N. HILL, Surgeon.
(Concluded from the last.)

IN this paper, Mr. Hill gives an account of his success in lepra, syphilis, hemicrania, and tic doloreux, the phagedenic ulcer, schirrhous, and cancer. The first of these diseases is too inaccurately described to enable us to determine the success of the remedy. The second relates chiefly to those cases in which mercury has either lost its effect, or become deleterious. In many of these, a bare dereliction of that remedy proves a cure. In the phagedænic ulcer, and some of the diseases called cancerous, the remedy has been long in use, and some satisfactory cures of tic doloreux are also on record. It is no part of our wish, to undervalue Mr. Hill's labours, but there is always danger in the strong partiality to individual remedies, as we have lately had frequent occasion to remark of another mineral.

ARTICLE 7.—*Sequel to "An Apology for the Cutting-Gorget."* By W. SIMMONS, Surgeon at Manchester.

THE only remark we shall make on this paper, is the author's proposal that the staff should be held by an assistant, whilst the beak of the gorget is introduced along the groove by the operator. The advantage proposed by this plan is, that the operator may have the use of both hands. Under such a mode of operating, we conceive the assistant should not be less ready at the business than the operator himself. In our opinion, however, most surgeons would wish to manage the staff whilst they are passing the gorget through parts so highly important.

ARTICLE 10.—*On the Connection that subsists in certain Cases between Amenorrhœa and Phthisis Pulmonalis, as Cause and Effect.* By WILLIAM SHEARMAN, M. D.

THIS paper contains some very useful practical inquiries, concerning a subject which very often puzzles the physician, namely whether amenorrhœa is to be considered as a primary or secondary disease. In the case here described, we confess we remain very much in suspense, but cannot help offering a hint, which we doubt not will be well received by the author. When we are introduced to a young woman about 20, delicate, but healthy, till the last five months, with a quick pulse, and many symptoms of emaciation, there is always some uncertainty whether we are made acquainted with all the probable causes of her complaint. Even if the tender passion has no share in it, we shall frequently find that some source of anxiety has gradually enfeebled all the energies of life, and excited into action certain parts, which, though previously diseased, might, under more favourable circumstances, have continued without interrupting the actions of those organs in which they are seated. These causes are carefully concealed by the patient, and sometimes

sometimes unknown to, or purposely overlooked by those about her. At length the disappearance of a discharge, to which the sex are, with much propriety, very attentive, gives the first alarm; but before this, considerable mischief has taken place, and the uterus is only one of various organs whose functions are interrupted.

After this preface, we shall proceed to give the case in the author's own words.

" A young woman, aged 20 years, of a very delicate habit, but in pretty good health, had experienced about five months ago an obstruction of the menses in consequence of cold; from this time her health gradually declined, she became languid and weak, had frequent pains in her side, and occasionally a short dry cough. Her appetite was impaired, and she became rather emaciated. In the month of July I first saw her; at this time she complained of pain in the left side, occasional fits of coughing, which recurred at uncertain intervals, but generally with considerable violence night and morning. She had scarcely any expectoration, little thirst, pulse 120, appetite impaired, bowels regular, countenance and lips very pale; there had been no return of the menses since their first suppression. A blister was immediately applied to the pained part, and directed to be kept open; five grains of rubigo ferri, combined with myrrh and castor, to be given three times a-day, with infusion of chamomile flowers, and the feet to be immersed in warm water every night. The pain was removed by the blister, and it was healed up. The medicines were continued about six weeks; during this time the pain occasionally recurred, which was always soon removed by a blister. The cough was sometimes considerably better, sometimes aggravated, with trifling expectoration; her pulse was diminished to 90; her appetite improved, and her countenance looked better. I now discontinued my attendance, and have since learned, that the only remedies she afterwards used were, expectorants and blisters, occasionally, when there was cough or pain, and she *entirely omitted* all other medicines. She continued without much alteration, excepting that she gradually grew weaker, and within the last fortnight was almost confined to bed, without, however, the cough or expectoration being greater than before. On the Saturday morning previous to her death, she was seized with violent excruciating pain in the abdomen, particularly about the umbilicus, which continued, with more or less violence, for several hours; it then left her, and she seemed much in the same state as before, until the Thursday morning, October 13th, when, soon after having got out of and into bed, without assistance, she suddenly expired.

" On opening the thorax, there was found a very general adhesion of the pleura pulmonum to the pleura costalis, yet not so firmly but they might be easily separated by the fingers; there was a small quantity of fluid in the cavity, not exceeding three or four ounces; the lungs were very dense, and of a dark colour, resembling

sembling the liver in appearance; portions of them, when put into water, fell to the bottom. Being cut into, some of the bronchial cells contained a purulent matter, but in small quantity, and here and there was a small excavation the size of a pea; a few small tubercles also were found, not inflamed. The external surface of all the small intestines was very red, and seemed to be studded with small red points, resembling the villous coat of the same intestines when injected. There was no appearance of gangrene, neither was there any adhesion between the different convolutions of them, nor between any of them and the peritonæum; the omentum also was extremely vascular, the mesenteric glands were enlarged and hardened in several places, the pancreas, spleen, and other viscera, were of their natural appearance.

"That the lungs were injured in a great degree, was evident from the tubercles found in them, and from the pus contained in the bronchial cells, but still the ulceration had not arisen to such a height as to be the immediate cause of death. More extensive affections than the present one are perhaps frequently recovered from, and tubercles may remain for many years with impunity, if no exciting cause of inflammation arise. Although, likewise, there were marks of inflammation upon the intestines, yet this inflammation did not immediately destroy the patient; for the pain had left her some days previous to her death, indicating a cessation of the inflammation, which, as it was not followed by gangrene, cannot be considered as the cause of death. The enlarged state of the mesenteric glands affords a presumption, that the flow of chyle into the blood-vessels might have been interrupted, but certainly there was not sufficient appearance of emaciation in the dead body, to enable us to attribute her death to this circumstance. We must look for the cause of death, not in the affection or destruction of any one particular organ, but in that state of general debility, consequent upon the interruption of a very important function in the female economy, during which state of debility, parts of the body peculiarly predisposed are very apt to take on disease. In the present patient, there appeared to exist a scrofulous diathesis, wherein the lungs and mesenteric glands are always readily susceptible of disease, from the slightest causes, and always the more readily the greater the state of weakness in the system, however induced. Every kind of weakness is accompanied with irregularity in the action of the living power; hence spasmodic contractions of various parts. This disposition to preternatural contraction is particularly observable to take place in the blood-vessels, in all cases of amenorrhœa, forming the principal symptom in what has been called chlorosis, differing from hectic fever, chiefly, in depending upon a morbid action of the vessels themselves, independent of the absorption of extraneous acrimony. This state of the vessels is perhaps at first produced by plethora, arising from a retention of a quantity of blood, which excites the larger arteries to stronger action, while yet the resistance in the extreme vessels in the uterus is not over-

come

come by its increased action, long continued, exhausts the living power, and produces weakness. During this state of general weakness, and morbid action of the blood-vessels, partial inflammations are very apt to arise. No wonder, then, that the lungs, when, from constitutional predisposition, they are so susceptible of disease, should be one of the first parts to take on inflammation. If by suitable remedies the lungs are relieved, (the disposition to general inflammation still continuing from its original cause, the suppression not being removed) some other part is very readily affected; hence in the present case arose the inflamed state of the intestines, during which, all the thoracic symptoms disappeared. That this irregularity of action in the vessels, sometimes exciting symptoms of inflammation in one part, sometimes in another, entirely depends upon the suppression of the menses, is evident, from its generally ceasing upon the return of that evacuation, and from the perfect restoration of health immediately following it. No occurrence is more common than the attack of cough, pain in the side, and difficulty of breathing in females, soon *after* the obstruction of the menses, and upon their recurrence all these symptoms going off."

"Dr. Beddoes, it is urged, observes, 'In some instances, when the fox-glove has removed the hectic fever, and greatly reduced the *expectoration and cough*, the decline shall become almost imperceptible, the patient *frequently appearing chlorotic*, but being really phthisical, as the *event* most commonly, and *sometimes* dissection, has evinced.' This serves to confirm the opinion, that the pulmonary symptoms are not in these cases the original idiopathic disease. If it be objected, that this doctrine can only be applicable to incipient phthisis in *females*, I would appeal to the experience of practitioners to determine, whether, in the female sex generally, the approach of phthisis is not more insidious, and its progress more slow than in men, where we usually find the attack more marked, and immediately consequent upon some obvious occasional cause, the symptoms sooner becoming more violent, and its whole progress more rapid. That this difference in the appearance of the disease arises chiefly from its frequently being rather symptomatic than idiopathic in females, will be apparent, if we find, that when phthisis arises in them from some obvious occasional cause, and where there has *never occurred suppression of the menses*, its attack and progress are more marked and rapid, than in the male. That it is so, I think experience will justify me in asserting; and impressed with this opinion, I cannot but recommend that we should keep in view the probable dependence of the pulmonary symptoms upon the interrupted functions of the uterus, and direct our treatment accordingly, at least, until we are convinced upon trial, that the opinion itself is fallacious, and the proposed treatment inefficacious or prejudicial."

Many ingenious observations are added by Dr. Shearman, on the remedies found successful in such complaints, particularly the celebrated

lebrated recipe of Dr. Griffiths, and the success with which it is sometimes attended in cases which threaten pulmonary consumption. On the whole, the paper abounds with useful practical remarks.

ARTICLE 11.—*Case of a singular Disease of the Heart.* By HENRY WISHART, Member of the Royal College of Surgeons, and one of the Surgeons of the Public Dispensary, at Edinburgh.

ANOTHER melancholy case, apparently arising from inflammation at the source of the circulation. We trust the frequent occurrence of such cases, will gradually convince every practitioner how improperly the lancet has been omitted, or how absurdly it has been dreaded in many cases of intense pain in those regions which contain viscera, the interrupted functions of which, must produce a calamitous life, if not an early death. We shall not be suspected of arraigning the practice of any individual. The commencement of the above case was much before the relator was consulted. His candour and accuracy does him equal credit. But we wish to take every opportunity of impressing on that class of our readers, who, for the most part, see diseases in their earliest stage, the importance of arresting them in the beginning, watching the progress of the patient's convalescence, and even for some years after attending carefully to every symptom, especially at periods of the year which have previously proved alarming.

Surgical Observations on the constitutional Origin and Treatment of Local Diseases; and on Aneurisms. By JOHN ABERNETHY, F.R.S. Honorary Member of the Royal Medical Society of Edinburgh, and of the Medical Societies of Paris, Philadelphia, &c. Assistant Surgeon to St. Bartholomew's Hospital, and Teacher of Anatomy and Surgery.

BY a Preface we are informed, that this work is to be considered a republication of the Author's former writings, leaving out the physiological parts. " With regard to the cases," says Mr. Abernethy, " which I consider as the valuable part of the book, I may observe, that it is not to be expected that the records of them will make so strong an impression on the minds of the readers, as the observance of them has done on that of the writer; but when the same occurrences are met with in practice, then will the impression become more vivid, and knowledge arise, as it usually does, from personal experience. If the facts contained in these volumes occurred so rarely, that others could not be expected to meet with them, their relation would be of little value. They may, however, not improperly be compared to certain species of plants, by no means uncommon, which are liable to be confounded with others by an inattentive observer; but when their discriminating characters are once pointed out, they may be so readily distinguished, collected, and examined, as to render a more minute description of them unnecessary. If diseases could, like other objects

jects which we mean to delineate, be placed in various points of view, and illuminated at pleasure, so as to show distinctly their different parts, one accurate representation would suffice; but we see them obscurely, and as knowledge increases, it serves, like light shining from different places, to illuminate the various parts of the objects of our examination.

"For, as I have expressed it in the first edition of these writings, 'in proportion as we advance in knowledge, we are led to remark many circumstances in the progress of a disorder which had before passed without notice; but which, if known and duly attended to, would clearly point out the nature of the complaint. Hence the records of former cases are of much less value; as the symptoms about which we are now anxious to inquire, have in them been entirely overlooked.' It therefore becomes necessary, that each writer should state those circumstances to which he has been particularly attentive; nor need he further delineate the case than by a general outline, so as to render it intelligible.

"The relation of cases may be compared to the representations which an artist gives of natural objects, and which are valuable only inasmuch as they are correct or vivid delineations of reality. Such portraits, sketched by a person of dull perception, or by one whose optics are perverted by prejudice and theory, are either valueless or deceptive; and hence, perhaps, has arisen that objection to books of cases which I find to be very prevalent. In the imperfect sketches which I have laid before the public, my chief object has been to touch up, and bring into view, some parts of the subjects which have not been so clearly seen or strongly delineated by former draftsmen."

This passage shows very clearly the importance of marking with minuteness every symptom of disease, and the advantage which an experienced practitioner will derive from his previous knowledge in detecting many particulars which may be overlooked by others. But the allusion to artists very much reminds us of one failing, of which, according to their technical language, many of them are accused, viz. of being *mannerists*. Genius and correctness are, unfortunately, too seldom united. The rapidity with which the minds of some men embrace objects of the most complicated nature, is highly flattering to themselves, and not less agreeable to such learners as conceive the whole of any science may be comprized in a nut-shell. Hence the fermentation of Sydenham, the spasm of Cullen, the sthenics and asthenics of Brown have been popular, because they seemed to be comprehended without trouble, and to be, with certain modifications, applicable to most diseases. These theories are, perhaps, most dangerous to those who receive them at second hand. Sydenham described his cases with accuracy, and varied his practice according to symptoms, though he contrived some way to reconcile all this variety with his favorite theory. But his followers were so tenacious of his doctrine that in their eagerness to conform to it, their practice for some their master's death was directly opposed to his.

We cannot help apprehending something of the same kind in our own days. That men of experience may entertain their favourite notions, and even model those notions to the facts before them, we can easily conceive; and if their practice varies conformably, no injury will be suffered. But if doctrines, apparently simple, and applicable to all cases, are strongly impressed on young men, will there not be too much reason to fear lest the result should be an uniformity in practice, scarcely consistent with the variety of forms in which diseases present themselves in different subjects and at different seasons? We wish these suggestions to be considered in a very general view, and shall now proceed to our Remarks on the Work, which is introduced in the following manner.

"An evil, (says our Author) seems to me to have arisen from the artificial division of the healing art into the medical and surgical departments. This division has caused the attention of the physician and the surgeon to be too exclusively directed to those diseases, which custom has arbitrarily allotted to their care. The effects of local disorders upon the constitution have in consequence been too little attended to; and indeed I know of no book, to which I can refer a surgical student for a satisfactory account of those febrile and nervous affections which local disease produces, except that of Mr. Hunter. The reciprocal operation of constitutional disorders upon local diseases has obtained still less attention. To investigate more particularly some parts of these subjects, and to submit them to public notice, are the proposed objects of the present paper.

"No part of the animal body can in general be very considerably disordered, without occasioning a correspondent derangement in other parts of the system. Such disorder has been considered by Mr. Hunter as the result of universal sympathy. This consent of the whole constitution with its parts, manifests itself, in particular instances, by a greater disturbance of the functions of some organs than of those of others; and from this circumstance diseases have derived the appellations by which they are commonly distinguished. If the actions of the sanguiferous system be principally disturbed, and the temperature of the body subject to unusual variations, the disease is termed fever: if the nervous system be chiefly affected, a state of vigilance or of delirium may be produced; convulsions and tetanus take place when the functions of the muscular system are more particularly deranged. Though the disorder of particular organs thus give a character and denomination to the disease, it is sufficiently evident, in the instances adduced, that the whole constitution is disturbed; while certain parts are chiefly affected, perhaps from unknown circumstances relative to the nervous system, or from a predisposition to disorder existing in the affected parts. It seems to be ascertained, that persons of particular constitutions are predisposed to those febrile actions of the sanguiferous system, which constitute the inflammatory fever;

ver; that there is a propensity to convulsions in children; and to tetanus in the inhabitants of warm climates.

"It may be a fit subject for inquiry, whether it be possible for particular organs to become affected otherwise than through the nervous system in general. Though some instances of sympathy are strange, and perhaps inexplicable, there are strong reasons for believing that the inflammatory fever, the state of vigilance and delirium, convulsions and tetanus, which arise in consequence of injuries of the limbs, are produced by irritation imparted to the brain, which, by a kind of reflected operation, occasions a greater disorder of some of the organs of the body than of others, and thus gives a character and denomination to the disease.

"That the stomach and bowels are disordered by injuries and diseases of parts of the body, has been remarked by various persons; but the subject has never been extensively surveyed, nor viewed with that accuracy of observation, which its high importance merits. It has been observed, that sprains of tendinous or ligamentous parts produce sudden sickness; and Mr. Hunter has attributed that shivering which is consequent to accidents, and attendant on some diseases, to the state of the stomach. It is known that, in some local injuries from accident or operations, the stomach has appeared to be the part principally affected. But remarks on the affections thus induced in the digestive organs have been made only in a cursory manner; and it is my intention to examine the subject more particularly. It also appears to me, that the connection of local diseases with the state of the constitution in general, is either not sufficiently understood, or not duly regarded, by the generality of practitioners; and I also mean to claim their particular attention to this subject. I shall in the first place select a case, to shew how the stomach and bowels, or, to speak yet more extensively, the digestive organs may be affected from local disorder."

It is impossible not to regret the vast scope of reflection that is forced on the reader in this short passage, without time to look about him, or any clue to direct him. Mr. Hunter is first introduced by referring the student to the largest, most profound, and in some respects, most complicated of all his works, and without the slightest direction to any passage; yet this is the only book in which will be found a "satisfactory account of those febrile and nervous affections which local disease produces." We are afterwards indeed informed, that Mr. Hunter considers such disorders as "the result of universal sympathy;" and in a Note we are further told, that it is the remote sympathy of the "patient and industrious" Mr. Hunter of which Mr. Abernethy speaks. By all this, we suppose it must be the intention of the Author to distinguish between that sympathy which shows itself by the affection of only one organ, from that which affects the whole constitution. Mr. Hunter has indeed explained himself with sufficient accuracy in this distinction. With him, the sympathy of the whole constitution

tution is well enough known by the terms symptomatic and hectic fever, and the remote partial is not less understood by the affection of the head with the stomach, the stomach with the uterus, tendons, and many other parts. All this, though intelligible in Mr. Hunter, it must be confessed, is related with more brevity than its importance, as a fundamental doctrine, seems to admit. Whether it is more perspicuous in Mr. Abernethy, our Readers must determine.

A case follows, in which the operation for the omental hernia was followed by symptomatic fever of three days. In the beginning, the stomach rejected every thing that was swallowed. After copious bleeding the sickness abated; but the tongue was furred, the skin hot, and the pulse quick, with great watchfulness. The patient took small doses of Epsom salts, and other purgatives, which remained on his stomach, but produced no effect. On the fourth morning, he "felt his bowels, to use his own expression, apparently filling; and a profuse discharge ensued. A dozen copious, fetid, and black evacuations took place between five and ten o'clock, and he had several others in the course of the day; after which his appetite returned, his tongue became clean, and a sound and continued sleep succeeded."

Mr. Abernethy remarks, that on this occasion the chylopoietic organs were the parts chiefly affected. We are by no means disposed to question this, for there cannot be a doubt that in all fevers, from whatever cause, all the functions are disordered; and the great importance of those abovementioned, render them the earliest object of attention. In such a state as this, it is not to be wondered if the intestines were insensible to very powerful stimuli, nor that their sensibility returned as the system at large recovered from its symptomatic irritation.

"It is probable also, (says Mr. A.) that the restlessness and anxiety of the patient were aggravated, if not principally caused, by the state of the chylopoietic viscera; since the relief which took place in those parts on the renewal of secretions into them, certainly removed the nervous and febrile symptoms. That the discharges were the effect of secretion is proved by the absence of alimentary matter in the bowels, in consequence of the action of the purgative administered on the morning of the operation, and the abstinence both before and after that period."

For our own parts, we should be disposed to consider the disorder in the chylopoietic organs as a part of that general irritation which induced disorder in every other part; and we should, for the same reason, consider the improved condition of those organs, and their sensibility to stimuli, as the consequence of the cessation of that general irritation, that symptomatic fever, that universal sympathy, which was excited by the operation. It is scarcely less common for the brain to be affected under similar circumstances than the stomach and bowels; in short, universal sympathy is excited, and those parts suffer most which, according to the constitu-

constitutional peculiarity of the patient, are most easily irritated. Whilst this irritation continues, every attempt at producing the customary effects of medicine will prove abortive. If symptoms of inflammation attend, bleeding is the only remedy; after which, quiet, and the administration of such simple liquids as are found most agreeable to the patient, are all that can be attempted till the irritation subsides.

"I could relate (says Mr. Abernethy) numerous cases in support of the inferences which I have drawn from the preceding history, that local irritation acting on the nervous system may affect the digestive organs in a very serious manner, and thereby create great general disorder of the system, which is afterwards alleviated in proportion to the amendment that ensues in the state of those viscera. Such consequences of great local irritation must frequently occur to every one; it is therefore unnecessary to adduce more instances to support the opinions here delivered.

"With respect to the treatment of cases of this description it may be right to add, that the primary object should be to produce secretion from the irritable organs. In the case which has been related, and in many others recorded in this volume, the effect of secretions occurring from the disordered organs in relieving their irritable state is very manifest. In many instances opium will not prevent continual efforts to vomit, yet when by magnes. vitriolat. or purgatives administered in the form of pills and clysters, stools are procured, the vomiting ceases, the stomach retains both food and medicine, and general tranquillity of constitution is as suddenly restored."

We should rather say, that when these organs recover with the rest from the universal sympathy, their secretions will follow the customary stimuli. In the above case, Mr. A's primary object was copious bleeding, before which the stomach rejected every thing.

A Chapter, or a proposition follows, entitled, "A slighter degree of continued local irritation will produce a less violent disorder of the digestive organs." In this we meet with nothing to which we can object, excepting that some well known practical facts are delivered in a language which would lead us to suppose that the author was telling us something new. We extract the following paragraphs, to show the author's mode of describing hectic fever from large abscesses; the mode in which a common ulcer partakes of the fluctuations of health in an irritable subject; and the various sympathies attending dentition.

"If then, (says Mr. A.) vehement local irritation can produce a violent disturbance of the chylopoietic organs, it may be expected that a less degree of a similar cause will produce slighter effects of the same nature. Indeed, the foregoing case was related not merely because it seemed worthy of record by itself, but chiefly to prepare the reader for the observations which are to follow.

"This slighter degree of derangement occurs in the advanced stages of lumbar abscess, diseased joints, compound fractures, and

all kinds of local disease, which impart considerable and continued irritation to the whole constitution. We also find a less important disease, as, for instance, a fretful ulcer, keep up a disorder of the system in general, and of the digestive organs in particular, which subsides as the irritable state of the ulcer diminishes. But as practitioners in general may not, perhaps, have so attentively remarked these circumstances, as to be familiarly acquainted with them, it may be useful to mention a very common occurrence, which cannot have escaped observation. I allude to the effects of the irritation of teething upon the health of children. The brain is sometimes so affected as to cause convulsions; the digestive organs are almost constantly disordered. The appetite fails; the tongue is furred; the secretions of the liver are either suspended, diminished, or vitiated. The bowels are either purged or costive, and the fæces fetid. The fæcal matter is often mixed with mucous and other secretions. There is also frequently a very troublesome cough. Such symptoms generally subside when the local irritation ceases, but sometimes the disorder of the digestive organs, thus excited, continues and disturbs the general health of the patient."

The subject of the digestive organs, of the biliary secretions, and of the alvine discharges, is continued for several pages; but whatever axioms or inferences the author may wish to draw, we confess reluctantly, that we have not been able satisfactorily to inform ourselves. There are many common remarks mixed with others which are more new; but the loose manner in which the whole is tacked together, deprives the reader of many advantages, which the experience of Mr. Abernethy must otherwise have afforded. In the midst of many conjectures on the use of the bile, we have the following passage in the form of a Note.

"In the inquiry into the probable uses of the bile, it ought to be observed, that in many persons, in whom that secretion is either for a considerable time wholly suppressed, very deficient, or much depraved, it does not appear that the nutrition of the body is defective."

In a work intended to instruct the younger practitioners, it would have been desirable, that this note should have been taken into the text and more extended. By the last limb of the sentence, is it intended we should understand, that the body being nourished as before, no inconvenience occurs to digestion from the loss of bile? or is it only meant to show, that the quantity of fat may be the same, though digestion is injured from a deficiency of bile? It is certain, that in children who live much on milk and farinacea, the stools are frequently colourless without any apparent want of health, or even of cheerfulness. On this account, we should have thought less of the remarks contained in the note, had not our author insisted, afterwards, so much on the colour of the fæces, as indicative of the state of health.

Another section devoted to this part of the subject, describes the defect of these organs as manifested by a dry tongue, furred particularly

larly at the back part, pain in the epigastric region, turbid urine, &c.; in which we have still to regret the want of connection or arrangement, whilst we cannot but be pleased with many of the remarks.

We are next presented with some paragraphs, superscribed, "Occasional effects of disorder of the digestive organs."

This relates principally to the treatment; the plan of which may be easily conceived, as we have hitherto heard of little but diseases of the digestive organs. Mild aperients with stomachic bitters, and occasionally mercury in small doses.

"When the state of the health required it, says Mr. A. or the disease did not yield to the treatment which I have described, I have referred the case to the physician; under whose direction benefit has been obtained by medicines of more activity than those which I had ventured to recommend, conjoined with tonics, and those medicines which are usually termed nervous.

"In investigating the treatment of these disorders, it is necessary to ascertain, not only what medicine is beneficial, but also what change it produces in the circumstances of the disorder. The administration of a medicine may in one case be succeeded by a discharge of bile, and a striking relief from long continued and distressful feelings: yet the same medicine may be given in many other instances without the same consequence. Was the change, then, in this instance, accidental? Or must it be attributed to some unnoticed peculiarity in the disease or constitution?

"I have generally explained to the patients, the objects which I had in view, in correcting disorders of the digestive organs, by saying that there are three things which I consider as right and necessary to the cure of disorder. First, that the stomach should thoroughly digest all the food that is put into it. The patient perceiving the necessity of obtaining this end, becomes attentive to his diet, and observes the effect which the quantity and quality of his food and medicines have upon his feelings, and the apparent powers of his stomach. Secondly, that the residue of the food should be daily discharged from the bowels: here too, the patient apprized of the design, notes what kind and dose of purgative medicine best effect the intention; and whether it answers better if taken at once, or at intervals. Thirdly, that the secretion of bile should be right, both with respect to quantity and quality. In cases wherein the secretion of bile has been for a long time deficient or faulty, I recommend, as I have said, unirritating and undebilitating doses of mercury to be taken every second or third night, till the stools become of a rhubarb colour. This mode of exhibiting the medicine has at least the advantage of being innocent, and if months elapse before the object is accomplished, we cannot wonder at the tardiness of the cure, when we consider the probable duration of the disorder, prior to our attempts to correct it. The patient is relieved in proportion as the end is accomplished, which feelingly induces him to persevere in such innocent measures. By thus engaging the co-operation of the patient, the practitioner

titioner will, in my opinion, derive considerable advantage in the treatment of the case."

By this passage, we learn that Mr. Abernethy consigns his more stubborn cases to the physician. Some lighter cases it appears are relieved almost instantly; on these he expresses a doubt, whether he is to impute the change to "accident, or some unnoticed peculiarity in the disease or constitution." We are concerned to see such a waste of language under all the formality of observation! What is accident, we would ask?—Does true philosophy admit any such thing as accident? And if pathology indulges herself in such an expression, does she mean any thing but "some unnoticed peculiarity in the disease or constitution." Why then this distinction without a difference: And if, as we are told on other occasions, months elapse before the object is accomplished under this innocent mode of treatment; do we not know how generally such ailments relieve themselves, and how ready that class of patients, who love to "co-operate" with their medical adviser, are to fancy themselves better, under a plan which they suggest or approve.

The work now takes the form of Sections, containing "cases illustrative of the author's doctrine. The first is on nervous and muscular disorders." These are chiefly paralytic diseases, resembling such as arise from a distorted spine or carious spinal processes. In some of these the author found great advantage from such remedies as restored the digestive organs, or such a plan of life as proved the means of generally invigorating the patient. These Cases may be read with great advantage by the younger practitioner. The habit of applying issues or blisters indiscriminately in all such cases, we have often seen reason to regret, and excepting where the disease seems connected with chronic inflammation, we never saw much benefit derived from them. We would however, remark, that as Mr. Abernethy finds his plan succeed sometimes suddenly, sometimes after months, so Mr. Pott found his caustics always succeed, sometimes early, sometimes after more than a twelvemonth.—Let these foibles, in distinguished characters, teach us all to be suspicious of the suggestions of our own fancy!—There is a short note which we cannot omit.

"I have seen several cases which induce me to believe that the weakness of the sphincter vesicæ, which occasions young persons to void their urine during sleep, very frequently arises from the same cause."

Thus a process which takes place only during sleep, arises from a weakness in the sphincter vesicæ in subjects who, whilst awake, can retain their urine without difficulty. We shall only hint at another very eminent surgeon, who seems rather disposed to cure all diseases, slow fevers among the rest, by setting the urinary organs to rights, just as Mr. Abernethy would cure a defect in the urinary organs by improving the digestion, and thus relieving his patient of a low fever.

"I think, says Mr. Abernethy, that local irritation may disorder

order the digestive organs; which disorder continuing, and aggravating the affection of the sensorium, may possibly lead to the production of tetanus, at a time when the wound is no longer irritable. In four cases of tetanus, in which I had an opportunity of inquiring into the state of the bowels, the evacuations from them were not like fæces. I wish to propose, in investigating the cause of tetanus, as a question, What is the state of the bowels between the infliction of the injury and the occurrence of that dreadful malady?*

On this passage we shall only remark, that the reader cannot be directed wrong in his practice. The *local* disease he will of course attend to, nor do we suppose he will be inattentive to any error in the digestive organs. The question proposed at the close of the paragraph is we apprehend intended for other climates, where lock-jaw is more common. In this country it is so little expected, and when it occurs, is so generally after the appearance of a wound is mending, that we shall scarcely persuade every patient to watch the colour of his fæces during the whole period. In warmer climates the event is more common and more rapid. If in these an alteration should be found in the appearance of the fæces, will it not be rather suspected, that the digestive functions have suffered in common with the other parts of the system, than that they have been the immediate cause of lock-jaw?

In the next Section, the same inquiries and suggestions are continued "on the effect of disorders of digestive organs attending injuries of the head." The 3d section is on "undefined and undenominated diseases arising from disorder of the constitution;" the 4th, "on more defined diseases, as carbuncle and scrofula, arising from disorders of the constitution;" the 5th, "on diseases of various glands, arising from disorders of the constitution;" the 6th, "on disorders of parts which have a continuity of surface with the alimentary canal." As all these are directed to the same object, our readers will not expect us to be very particular in detailing the various cases by which they are illustrated. It is enough to say, that

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* "Such cases as I have related, with others that it would be foreign to my present purpose to mention, have impressed the opinion on my mind, that disorders of the digestive organs may originally cause, or may secondarily aggravate a nervous disorder; and produce, as has been 'mentioned, in the nervous system, a diminution of the functions of the brain, or a state of excitation causing delirium, partial nervous inactivity, and insensibility; or the opposite state of irritation and pain; in the muscular system, weakness, tremors, and palsy; or the contrary affections of spasms and convulsions.' Could these circumstances be proved, it would be scarcely necessary to add, that those painful affections of parts, to which perhaps some predisposition exists, may be excited in a similar manner; such as gout and rheumatism. Indeed, rheumatic pains are very usually concomitant upon that state of constitution, which existed in the patients whose cases I am relating."

there

there are few disorders, or few parts disordered, that Mr. A. has not relieved by small doses of mercury, stomachic remedies, and gentle purgatives. Nor do we see any necessity for this division of the *seat* of a disease any more than of the disease itself.

The last mentioned Section, on disorders of parts which have a continuity of surface with the alimentary canal, begins with diseases of the œsophagus, the Eustachian tube, or trumpet, as it is here called, and the nose; after which we have accounts of diseases in the eye, and on the common skin. It may be urged, that as the skin covers all these parts, the continuity of surface is known to exist. But is not such equally the case with every other part of the body? Why therefore any distinction on the score of continuity? In this respect we are ready to make large allowances for Mr. Abernethy's various engagements, and for that inattention to trifles which is sometimes thought characteristic of genius. But we cannot so easily excuse his printer. The following is the order of the Sections as they stand in the book. S. I. II. III. V. IV. V. V. This has sometimes increased the difficulty of making a clear analysis of the work, and will, we trust, be admitted among our excuses.

The last Section is the most interesting, as it contains what information the author has "obtained by dissection, relative to the *causation* of other diseases by those of the digestive organs." This abounds with many useful passages, some of which we would willingly extract, had we not already exceeded our limit, and did not a new subject still remain for our notice.

This division of the work begins like the former, with honourable mention of Mr. Hunter. It is however shown, that the great improvement made by that gentleman in the operation for the aneurism, appears, if not imperfect, at least to require the management of an artist equal to the inventor. The recurrence of hæmorrhage after the single ligature of the artery, is accounted for by Mr. Abernethy, in a satisfactory manner, as far as his mode of conducting the operation extends. His remarks on the plans proposed and adopted for improving the operation are still more satisfactory, and we are ready to admit the propriety of dividing the artery between the two proposed ligatures. But there is another name introduced in a Note, to which we conceive too little attention is paid. To explain ourselves the better, we shall extract the note and the passage connected with it.

"As large arteries, says Mr. Abernethy, do not ulcerate when they are tied upon the surface of a stump after amputation, it occurred to me that it would be right to tie them, in case of aneurism, as nearly as possible in the same manner and under the same circumstances. The large vessels on the surface of the stump continue to possess all their natural surrounding connexions, whilst they are left in a lax state, in consequence of their division.

"To accomplish this object in cases of aneurism, I propose that the operation should be performed in the following manner:—

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The operator should divide the immediate coverings of the artery, till he has fairly exposed its surface. When he can touch the bare vessel, he will not, I believe, find any difficulty in separating from it, by means of his finger and thumb, or the blunt edge of an aneurismal needle, the cellular substance that connects it to the contiguous parts. This part of the operation is not painful, and should be performed slowly. The firm sides of the vessel enables the surgeon clearly to distinguish its surface, and by keeping the finger in exact contact with it, a passage may be made completely round the artery. Care should be taken not to elevate the artery more than can be possibly avoided, because the artery would be stretched in its longitudinal direction by so doing; and care should also be taken not to injure the contiguous veins or nerves. When the operator has thus gently insinuated his finger between the vessel and its surrounding connexions, so that an inch of its surface is every where exposed, two ligatures may be put under it, one of which is to be carried upwards, and the other downwards, as far as the artery is detached, and then tied as firmly as possible. The artery should then be divided by a probe-jointed bistoury in the interspace between the two ligatures, but nearer to the lower ligature than to the upper one.

"In my opinion, large arteries should always be tied with moderately thick ligatures, because we may then draw the noose as tightly as possible, without apprehension of cutting or tearing the coats of the vessel, or of breaking the ligature. The latter occurrence would in many cases prove a very embarrassing circumstance, and it might be very injurious on account of the jerk communicated to the artery to a considerable distance. Also, when an artery is tied with a thick ligature, the compression made by it is not so great as to produce a speedy mortification and separation of the end of the vessel, so that the ligature remains, in general, a fortnight before it is detached, and therefore, time is allowed for the consolidation of the sides of the vessel prior to its separation.

"Doctor Jones, whose numerous and accurate experiments have thrown much light upon the natural means by which hæmorrhages are suppressed, thinks that the ligatures should be round and firm; because such cords are most likely to cut the internal coats of the artery. I am solicitous that they should be strong and moderately large; because, as far as I have remarked, large ligatures remain longest on the arteries before they are detached; and in examining the stumps of patients who have died after amputation, I have frequently seen the sides of the artery unclosed, even though the ligatures have fallen off from them."

In this extract, we find Mr. Abernethy expressing a wish, that the arteries should preserve all their natural surrounding connections. The advantage of this was long ago suggested in our Journal. Dr. Jones's experiments have since shown, that the preservation of this surrounding connection is of less importance, than the figure and mode of applying the ligatures. Mr. Abernethey indeed

deed says, that the ligatures should be moderately thick that we may have no apprehension among other events of "tearing the coats of the vessel." Yet "Dr. Jones, whose numerous and accurate experiments have thrown so much light on the subject, thinks they should be round and firm, because such are most likely to cut the internal coats of the artery." Now, we very much wish Dr. Jones had been more attended to in this disquisition. That equally indefatigable and ingenious gentleman found, that if the internal coats of the artery are divided, the consequence is a process of nature for the obliteration of the vessel, though it should remain undivided, and even retain its permeability. This most important discovery of Dr. Jones, we cannot but regret to see entirely overlooked. It is further to be remarked, that the same gentleman proved experimentally, that if an artery is divided obliquely and transversely less than one fourth of its diameter, then the injury may be restored; but if more than one fourth of the diameter was divided, it was found that ulceration took place, in order to make a complete division, the object of which appears to be, that the artery may have the advantage of retracting, and also that the process may be set up which is found to follow a complete division of the internal coats, namely, the adhesive inflammation, by which the cavity is obliterated. All these considerations from an author such as Dr. Jones is here described, are, we think, worthy of much more attention than is paid them. Is it not possible that the very mode of tying the arteries, by making an imperfect division of their internal coats, may have produced ulceration, when a complete division might have induced adhesion and obliteration of their cavities? In the only successful case, we are informed, that Mr. Abernethy passed two "*moderately thick* ligatures, tying them as *firmly* as he could." It is much to be wished, that mention had been made, whether the ligatures were round or flat.

In all other repects we are pleased with Mr. Abernethy's courage in undertaking, and judgment in conducting such important operations; but in future descriptions of dissections, after such events, we hope more attention will be paid to the result of those invaluable experiments, for which we are so much indebted to Dr. Jones.*

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* For an account of Dr. Jones's labours, and our remarks on them, see our Journal, vols. xv. and xvi. And for the advantage of preserving the surrounding vessels by which an artery is supported, see our Journal, vol. vi. p. 546, note, and the passage in the text to which it refers.

Udiometrical, Thermometrical, and Barometrical Statements, by Dr. T. Pole, of Bristol.

An Account of the Quantity of Rain fallen in each Month.

Numerical order of the month.	Months, as denominated in the Calendar.	1804 Inches	1804 100 of an inch	1805 Inches	1805 100 of an inch	1806 Inches	1806 100 of an inch	1807 Inches	1807 100 of an inch	1808 Inches	1808 100 of an inch	1809 Inches	1809 100 of an inch
1	January - -	4	43	2	44	5	97	2	28	1	5	4	12
2	February - -	2	48	2	30	2	14	2	15	0	59	3	26
3	March - -	1	80	0	98	1	67	0	34	0	35	1	27
4	April - - -	2	27	2	78	1	29	0	49	5	37	3	75
5	May - - -	2	75	1	43	1	50	5	82	2	99	1	45
6	June - - -	0	25	2	58	1	32	0	15	1	75	1	75
7	July - - -	3	78	2	60	3	87	4	21	2	76	1	7
8	August - -	2	26	2	22	4	27	2	55	3	6	4	38
9	September -	0	28	1	59	1	81	3	69	4	36	4	16
10	October - -	2	80	1	94	1	49	2	14	5	26	0	8
11	November -	5	44	1	32	3	36	5	44	3	8	1	54
12	December -	1	45	3	73	6	39	2	5	1	52	2	68
	Total	29	77	26	1	34	38	31	31	32	8	29	51

The average Temperature of each Month, from Observations made at 8 in the Morning.

Numerical order of the month.	Months, as denominated in the Calendar.	1804 Degrees	1804 100ths of a deg.	1805 Degrees	1805 100ths of a deg.	1806 Degrees	1806 100ths of a deg.	1807 Degrees	1807 100ths of a deg.	1808 Degrees	1808 100ths of a deg.	1809 Degrees	1809 100ths of a deg.
1	January - -	33	50	33	16	37	7	31	33	33	47	33	17
2	February - -	36	33	35	86	37	75	35	75	34	15	42	11
3	March - -	36	33	40	20	37	94	33	46	38	66	30	56
4	April - - -	37	99	42	87	43	80	42	33	43	10	39	77
5	May - - -	57	—	57	50	54	17	55	66	56	90	56	78
6	June - - -	62	—	57	50	61	80	59	45	59	90	58	85
7	July - - -	62	—	61	52	63	—	64	44	66	22	61	90
8	August - -	60	33	63	33	62	22	63	52	63	17	61	44
9	September -	56	32	58	—	54	52	48	27	45	80	56	76
10	October - -	49	99	43	—	48	66	51	46	44	3	46	17
11	November -	42	10	36	—	45	30	34	55	42	52	36	—
12	December -	33	50	37	—	44	44	31	55	33	10	37	94

The

The average State of the Barometer for each Month.

Numerical order of the months.	Months, as denominated in the Calendar.	1804		1805		1806		1807		1808		1809	
		Inches	100 of an inch	Inches	100 of an inch	Inches	100 of an inch	Inches	100 of an inch	Inches	100 of an inch	Inches	100 of an inch
1	January - -	29	60	29	60	29	62	30	5	30	10	30	11
2	February - -	30	25	29	85	30	5	29	91	30	5	30	75
3	March - -	29	70	30	—	29	50	30	15	30	30	29	58
4	April - - -	29	80	29	90	29	90	30	30	30	15	30	30
5	May - - -	29	40	30	—	30	5	30	95	30	15	31	10
6	June - - -	30	35	30	5	30	20	30	7	30	25	31	30
7	July - - -	29	90	30	—	29	90	30	15	30	25	31	42
8	August - -	30	—	30	35	30	—	29	75	29	45	31	49
9	September -	30	65	30	5	30	10	29	90	29	50	31	40
10	October - -	29	75	29	95	29	90	30	10	29	45	31	4
11	November -	29	90	30	30	29	85	29	75	29	65	31	10
12	December -	29	85	29	80	30	20	30	15	29	60	29	13

The highest Temperature of the Atmosphere, indicated by the Thermometer, at any one Time during the Summers of the last Six Years.

Numerical order of the month.	Months, as denominated in the Calendar.	Days of the month.	Degrees of temperature.	Years.
6	June - - -	25	86	1804
7	July - - -	17	86	1804
9	September -	18	77	1805
6	June - - -	10	84	1806
7	July - - -	22	85	1807
7	July - - -	12	91	1808
7	July - - -	27	78	1809

The

The lowest Temperature of the Atmosphere, indicated by the Thermometer, on the two coldest Days in the last Six Years, according to Observations made at Eight o'Clock in the Morning.

Numerical order of the months.	Months, as denominated in the Calendar.	Days of the month.	Degrees of temperature.	Years.
3	March - -	23	20	1804
12	December -	24&30	21	
2	February -	2	23	1805
11	November -	21	18	
1	January - -	30	20	1806
10	October - -	24	29	
1	January - -	15	18	1807
12	December -	23	16	
1	January - -	22	12	1808
12	December -	21	19	
1	January - -	23	10	1809
11	November -	20	16	

Report of the Diseases of Edinburgh for January, 1810. By John Roberton, M. D.

For several days after the commencement of this month the weather was uncommonly pleasant. Indeed, it was so extremly mild that vegetation had, in a few days, made considerable progress. About the end of the first third of the month, however, the weather assumed a very different aspect. It became cold and disagreeable for two days; great quantities of snow had fallen on the neighbouring mountains, and a similar fall, about the middle of the month, took place in Edinburgh. In the space of a few hours, the snow fell fifteen inches thick, which is a much greater fall than we have had in this city for several years. For two or three days, almost immediately after, the weather became soft, and much of the snow was gradually dissolved; but, about the beginning of the last third of the month, the frost became very intense. For a day or two about this time, a circumstance took place which seldom occurs in this part of the world. A very thick

thick fog prevailed all over the city, almost similar to the very dense ones which sometimes occur in London. Our fogs are almost always during soft weather, but in the present instance, the thermometer stood several degrees below the freezing point. The weather succeeding this, gradually became soft, and the snow was almost entirely dissolved in a few days. This was succeeded by a day or two of mild weather, and especially toward evening and in the mornings, fogs of considerable density overspread the city and vicinity. The remaining days of the month were extremely mild.

The barometer underwent but little variation during the whole month: it was rather high about the beginning of it, and was much in the same situation at its termination.

The thermometer, about the beginning of the month, was high, but, during the succeeding frost, it was often several degrees below the freezing point. During the thaw that succeeded, it again rose, and continued between 36 and 40 till the termination of the month.

The diseases which, during this period, have caused the greatest mortality, were fevers, small-pox, pneumonia, and enteritis. The last of these, however, did not so often prove mortal, during its active state, as afterward happened from dropsical effusions in consequence of the previous inflammation. There were, besides these now enumerated, a very great variety of complaints of a more trifling nature, which were not dangerous, but only proved troublesome during their existence. Such as catarrh, cynanche tonsillaris, rheumatism, and slight, but general eruptions on the skin.

The fevers, which, as usual, are of the typhoid kind, have, since last month, been greatly aggravated in their malignity; they have consequently proved mortal in various confined and dirty parts of the City.

The small-pox continue much the same as last month, and a great many of the people here not only now disbelieve the efficacy of cow-pox inoculation, but roundly assert that those who are subjected to it, are afterward affected with many other diseases, which, under other treatment, they would have escaped. To encounter the stubborn prejudices of an ignorant mob, is too hard a task for one person; I must therefore only lament, with all friends to important improvements, that such an evidently beneficial discovery should admit of doubt, or have its utility misrepresented.

The inflammatory diseases still continue milder than in former

former seasons. Some severe cases, however, of pneumonia, are occasionally to be met with in practice. Enteritis too, of considerable severity, sometimes occurs. Various instances of this disease terminating in dropsy, have, especially in patients advanced in life, been met with.

The cases of catarrh, cynanche tonsillaris, and rheumatism, have been very numerous. The first of these has yielded to the repeated administration of purgative medicines, the second to them, with the frequent use of gargles, and rheumatism to sudorific medicines, and when the acuteness of the symptoms have abated, to the application of friction. In all of these last mentioned complaints, preserving the body in an equal and dry temperature was indispensibly necessary.

The eruptions in the skin, though only troublesome during their existence, have been very general. In almost every case, a solution of muriate of mercury in spirit of wine has removed them in a few days.

INTELLIGENCE.

Medical Society of Paris.

This learned body held its first meeting for the present Session, (1809-10) on the 31st of October last.

After a short preliminary discourse by the president, M. Sedillot, the Secretary, in recapitulating the proceedings of the Society during the last year, gave a copious account of the perforation of the tympanum, as having been practised with success in several cases of deafness.

M. Nacquart read a paper under the title of "Topographical and Medical Observations on the Seventh Municipal Division of Paris." The public utility likely to be derived from a similar work on the forty-seven other municipal sections of Paris, formed the chief theme of this discourse, and M. Nacquart, in laying his own Memoir before the Society, expresses his hope that his example will be followed by the rest of the medical officers of Paris, as well as of other great cities.

The Society afterwards proceeded to award the prizes of the year.

M. François Hebreart, M. D. Surgeon *en second* to the Bicetre, obtained a gold medal of the value of 300 francs for the best Memoir on the following subject, as given out the preceding year: "Describe the character, causes, and treatment of gangrene, considered particularly with regard to the soft parts."

Silver

Silver medals for various valuable communications were respectively voted to M. Thiebault, Physician at Bruxeres; M. Boucher, Surgeon at La Fleche; M. Chapp, Officer of the Legion of Honour, and Surgeon Major to the Imperial Guards; M. Labonnardiere, Physician at Cremieu; and to M. Bertrand of Pont-du Chateau.

The following subject was then announced as a prize question to be decided in October, 1810.

"Describe the disease designated by the ancients, and particularly by the English medical writers, under the name of Angina Pectoris.

"Point out the causes which produce it, and the authors who speak of it in a particular manner; describe the diseases which resemble it most, the affections with which it is complicated, and those which it produces in its turn."

The prize is a gold medal, of the value of 300 Francs. Another gold medal, of the value of 500 Francs, to be awarded in October 1811, has also been offered by the Society for the best paper on the following subject.

"A clear and precise idea is to be given of the nature of contagion. Point out the differences considered with regard to the nature of its principles, and the various modes of its communication. Designate from among the diseases generally considered as contagious, such as are really of that description. Lastly, Point out the mode in which the contagion is communicated in each of them."

An anonymous friend to humanity has presented 300 francs to the Society to be also adjudged at its first meeting in October 1811, to the author of the most satisfactory essay on the following subjects.

"1. Enquire, from direct observations, into the nature and effects of Plica Polonica; point out the epiphenomena as well as any concomitant diseases which are foreign to it; describe the true causes of this affection of the hairy parts of men and animals since its origin, and in the different countries where it has been observed.

"2. Determine the circumstances under which these causes exert their influence; ascertain why the plica has at all times spared or afflicted certain classes, and why, on some occasions, it has been observed to prevail and to disappear alternately.

"3. Appreciate the value of the therapeutic and hygiene means hitherto proposed to combat or prevent this species of endemic; and point out the best method of extirpating it."

The memoirs on any of the above subjects, writen in Latin or in French, may be addressed to M. Sedillot, the Secretary, at No. 6, Rue de Favart. They must reach Paris at least two months previous to the October meeting of the Society, and are to be accompanied with a sealed letter, containing the name of the author in the usual manner.

M. TARENNE

M. Tarenne has discovered, that the slimy juice of snails is a specific for the cure of hernia, when the ruptured part can be returned, and it is not dangerous to confine it in the body. When this point is ascertained, he directs that a truss be made, having the ball at the end concave instead of convex, as usual, for the reception of a cup of equal diameter with the orifice of the hernia. The cup must be of porcelain, glass, or earthenware, that the liquor may not penetrate it, or undergo any alteration; and the edges of it should be turned, that they may not incommode the patient. It is to be filled with wool, which must be changed every other day. Two, three, or four hundred snails, are then to be procured, and kept in a place where they can procure food, as only two or three, or if they are small, six or eight, are to be used every day. The patient, before he rises, and after he has been in bed, removes the cup from the truss, and pricks the snail in different places with a pin. From each wound the snail gives out, through the opening in his shell, sometimes a bluish, sometimes a grey liquid, which must be caught on the wool in the cup. If only a thick froth oozes out, the snail must be thrown aside, and another taken in his stead. The cup being sufficiently filled with liquor, must always be placed exactly in the same situation on the affected part, then covered with a white linen cloth, and the ball of the truss applied on it. The latter must be sufficiently tight, to prevent the fluid from escaping. During this treatment, which will last three or four months, or more, the only precautions necessary to be taken are to shave the part once in four days, and not to leave it long uncovered, for fear of cold. If the cup rubs off the skin, it must be removed till the place is healed. In this case, the patient may remove the truss altogether at night, if it can be done without danger; and in the day-time he may wear it dry, filling the cavity with wool, and covering the hernia with a bit of cloth. By this treatment, a common hernia may be cured in two, three, or at most four months; after which, however, the patient should continue to wear the truss for six weeks, or two months, till the wound is sufficiently healed, to permit the muscles to resume their natural action.

M. Vauquelin, in the name of the Committee of the Chemical Arts, has lately reported on a manufacture of tallow for candles, professed to be purified from all animal substances of an infurious nature, to be free from all moisture, and not at all discoloured. "The tallow," says he, "which I carefully examined, is demi-transparent, perfectly dry, and sonorous. It is indeed so very dry, that when a blade of iron is passed over it, only lightly touching it, it gives an extremely lively phosphoric light, occasioned, according to all appearance, by an electric motion; for when this tallow is recently melted, and the surrounding air is extremely dry, the mere passing of the hand on it is sufficient to produce sparks. The dryness of this tallow is still farther demonstrated

monstrated by its perfect transparency when melted: at the temperature of boiling water, neither bubbles nor clouds are discernible. This tallow, it is affirmed, may be kept without any discolouration or rancidity for two years. The candles made of it are extremely white, their light is very pure, they emit little or no smoke; they do not gutter or run, and require snuffing less frequently than others. They are about five per cent. higher in price than those of common manufacture."

It has long been matter of surprise to foreign naturalists, that although in this country, botany has been cultivated with a zeal and success which leave nothing to desire, scarcely any attention has been hitherto paid to the sister science entomology; so that while the vegetable productions of the British Isles are for the most part well known, and accurately described, not a third of our numerous tribes of insects have been noticed or enumerated. This neglect is, doubtless, principally to be attributed to the want of a popular and comprehensive elementary work, adapted to the present improved state of the science. To supply this desideratum, and facilitate the study in Britain, of a department of natural history, singularly amusing and instructive, abounding in objects striking in their shape and structure, splendid in decoration, and in the highest degree interesting in habits, manners, and economy, the Rev. W. Kirby, A. B. F. L. S. author of Monographia Apum Angliæ, and Mr. W. Spence, F. L. S. are engaged in preparing an Introduction to Entomology, which is in a state of considerable forwardness. The plan of the work is popular; but without overlooking science, to the technical and anatomical departments of which, much new matter will be contributed. Its object, after obviating objections, and removing prejudices, is to include every thing useful or interesting to the entomological student, except descriptions of genera and species, which are foreign to the nature of such a work.

The subject of apartments with a graduated temperature, has for some time attracted the attention of the medical public. We are glad to find, by a paper from Dr. Pearson, in the Philosophical Magazine, that a speculation is on float for erecting spacious buildings on such a plan, to receive those invalids as cannot change their residence to a softer climate. On this occasion we must do justice to our own Journal for having first suggested such a plan. In vol. v. p. 311, is a letter from Dr. Adams to Dr. Willan, giving an account of the climate of Madeira, which he concludes thus. "It may be well worth your while to try whether spacious buildings, regularly heated, safely ventilated, and large enough to admit of necessary exercise, may not answer the purpose for such whose want of means, of courage, or of leisure, prevent their taking a voyage to a more genial climate."

The

The College of Surgeons have at length proceeded so far with their building, under the auspices and by the pecuniary assistance of the nation, that Mr. Hunter's Collection is now under arrangement, at their Museum in Lincoln's Inn Fields, or rather in Portugal Street, for as yet only that side of the building is completed. The theatre is spacious, and well contrived. Sir William Blizard has given his second lecture; and after his course, Mr. Home commences another on Comparative Anatomy.

One of the most remarkable facts in the history of geography, is communicated by letters conveyed in the last ships from the Cape of Good Hope. The island of Bossen, or Penguin, sometimes called Seal Island, at the western extremity of Table Bay, has entirely disappeared beneath the waters. An earthquake was felt at Cape Town, in December, only two leagues distant, by which some damage was occasioned to the houses; but we do not find that any lives were lost at that place; and it is supposed that the convulsion extended to Bossen. The island was about two miles in length and one in breadth, and was, although flat, somewhat more elevated above the surface of the sea, than the contiguous island of Elizabeth. The Dutch, when in possession of the Cape, kept a guard of twenty-four men on Bossen; and it was employed as a place of banishment for criminals, to the number of from seventy to one-hundred, who dug lime-stone to supply materials for the buildings on the adjacent continent. How many lives have been lost by this awful visitation, is not ascertained.

Dr. ADAMS has nearly completed his preparation for a Course of Lectures on Pathology and Therapeutics. It is his intention to deliver them early in the spring, as soon as the season becomes too much advanced for general dissecting. Further particulars will be given in due time.

Dr. CLOUGH, Physician Man-Midwife to the St. Mary-le-bone General Dispensary, &c. will on Monday the 12th of March, at ten in the morning, commence his next Course of Lectures on the Science of Midwifery, including the Diseases of Women and Infants; and for the convenience of Students attending other Classes, Hospitals, &c. his Evening Course on Tuesday the 13th at seven, at his Lecture Room, 68, Berner's Street. For a Prospectus and Syllabus, apply to Dr. Clough as above.

Dr. REID will commence his Spring Course of Lectures, on the Theory and Practice of Medicine, on Monday the 19th of March, at six o'clock in the evening, at his house, Grenville Street, Brunswick Square, where the Course will be continued until its conclusion in the latter end of May.

Dr. LATHAM has in the press, Facts and Opinions concerning Diabetes.

Mr. LEE, surgeon, of Shields, will shortly publish an Essay on Mortification.

Dr. SMITH is printing a Translation of Le Roy's Instructions for Gouty and Rheumatic Persons.

A Fourth

A Fourth Edition of Dr. TROTTER's Essay on Drunkenness, and its Effects on the Human Body, with considerable additions, is now in the press, and will be published in the Course of next month.

Dr. WATSON has nearly ready for publication, a Theoretical and Practical View of the Instruction of the Deaf and Dumb; containing Hints for the Correction of Impediments in Speech, and illustrated by numerous Plates.

We have to lament the early death of a truly valuable member of the profession, Mr. SAUNDERS, of Ely Place, Surgeon to the London Infirmary for Eyes and Ears, at the age of 37. He died somewhat suddenly, but with occasional symptoms which afforded too much probability of mischief in a most important organ. At uncertain intervals, a few weeks before his death, he complained of paralysis in distant parts of his extremities, and sometimes of loss of memory for a short period. On the day of his death he appeared better than usual, till he fell senseless almost before he could express his own sensations. The body was examined by Mr. Astley Cooper and other gentlemen. In the brain, near the pons varolii, was found an abscess, which had gradually extended to an artery, the ulceration of which produced hæmorrhage and immediate death. Due respect was paid to his merits as a scientific character, and the first institutor of a benevolent charity, which through his well directed exertions, aided by his coadjutor Dr. Farr, had acquired an extent of patronage which nothing but the general acknowledgement of its usefulness could have produced. He was buried in the vault of his parish church, St. Andrew's, Holborn, and his funeral was publicly attended.

NEW MEDICAL PUBLICATIONS.

Observations on the Rupture of the Uterus, on the Snuffles in Infants, and on Mania Lactea. By Thomas Deuman, M. D. 8vo. 2s 6d.

Cursory Remarks on Corpulence. By a Member of the Royal Corporation of Surgeons, 2s.

ERRATUM.

In the first article of our last Number, in the Superscription, for James, *read* Henry Earle.